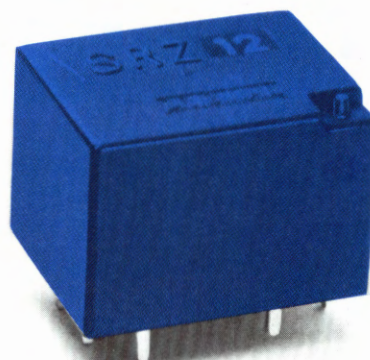
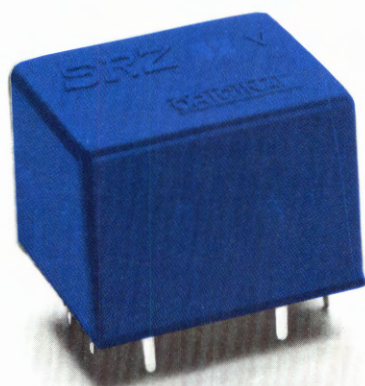


TYPE SRZ

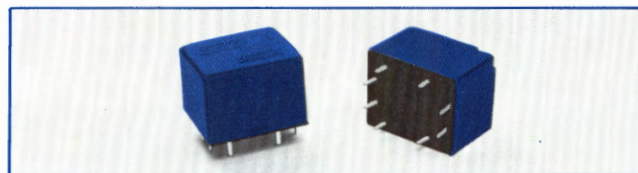
LOW COST.
HIGHLY RELIABLE

MINIATURE HIGH PERFORMANCE LOW COST SRZ RELAY



This SRZ Relay offers extremely smallest size on 2 transfer (DPDT) contact arrangement to meet the recent demand for miniaturization of control devices and equipment, and also prepares 3 kinds of contact capacity of 2A with contact element of Ag, 3A with AgCdO and 5A with Ag-Aup. SRZ H type covering load current by 5A is most suitable to applications of Hi-Fi audio equipment, because of high sensitivity covering from small current (dry circuit) by 5A.

This Series Relay also offers 3 kinds of outside case construction of general type (SRZ), complete Anti-flux type (SRZ-S) and complete hermetically sealed type (SRZ-SH) which is washable construction. The design conforms to foreign safety standard like UL, CSA, VDE, etc. despite very small feature of 20.7 mm x 16.1 mm x 14.3 mm height.



Main Features:

1. High performance low cost 2 transfer (DPDT) P. C. Board Use Relay
2. Smallest size (20.7mm x 16.1mm x 14.3mm) and light weight (8.5 grams)
3. Switching operation covering load current by 3A with contact element system of AgCdO
4. High dielectric strength covering more than 1500 VAC
5. High reliability by complete Anti-flux outside construction (SRZ-S) offering effective productivity
6. Most simplified mechanism to meet massproduction process for high reliability and performance
7. Capacity in magnetic circuit is designed to be suppressed to minimum value
8. Long service life of electrically 100,000 cycles and mechanically 10,000,000 cycles

ORDERING CODE

** REMARKS **

In case you require your own specs., please contact us.
We may arrange your specs., for our acceptance.

S R Z H - S - 2 1 2 D M 1

Type

Heavy Duty type

S: Anti flux type

SH: Hermetic Sealed type

Rated voltage

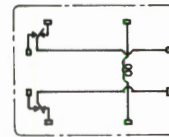
203D: 3VDC
206D: 6VDC
209D: 9VDC
212D: 12VDC
224D: 24VDC
248D: 48VDC

Contact Material

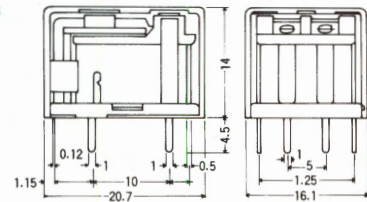
Non-Indication: Ag
1: AgCdO
2: Ag-Aup

Non-Indication: 2 Transfer
M: 2 Make contact
B: 2 Break contact

Connection Diagram



Dimensions



Printed Circuit Diagram

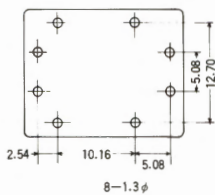


Fig. 1 Coil Temp. Rise Vs Coil Power

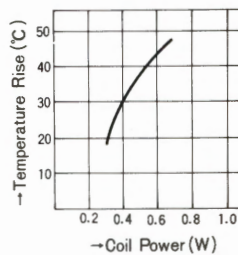


Fig. 2 Time Values Vs Coil Power

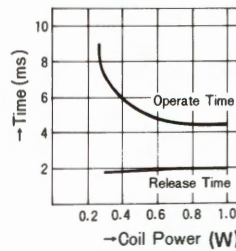
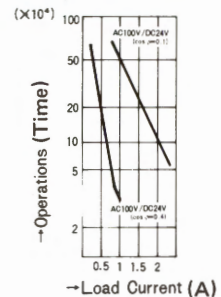


Fig. 3 Life Expectancy



Nominal Coil

Nominal Voltage (V)	Nominal Current (mA)	Coil Resistance (Ω)	Pull-In Voltage (V)	Drop-Out Voltage (V)	Max. Continuous Rated Voltage (V)
DC 3	150	20	less than 75% of nominal voltage	more than 10% of nominal voltage	130% of nominal voltage
DC 6	75	80			
DC 9	50	180			
DC12	37.5	320			
DC24	19	1,280			
DC48	10	4,800			

Remark: The above values are at 20°C DC 48V available if specified(non-standard)

Contact Capacity and Contact Materials

			SRZ	SRZ-□-□ 1	SRZH-□-□ 2
Capacity	Resistive Load	AC 120V/DC 24V cos φ = 1	2A	3A	5A
	Inductive Load	AC 120V/DC 24V cos φ = 0.4	1	1.5	1.5
Contact Material			Ag	AgCdO	Ag-Aup

Specification

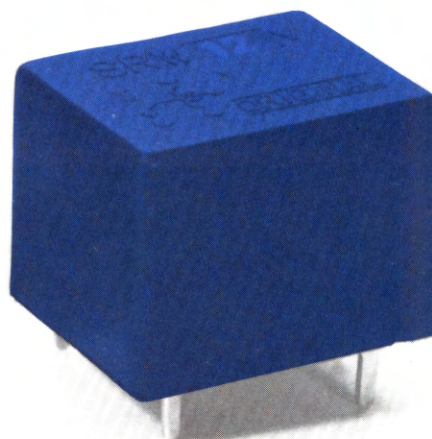
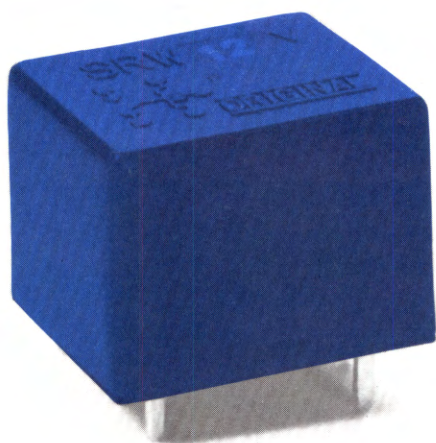
Coil power consumption (at nominal voltage)	0.36W	Vibration Resistance	Vibration 10-55Hz Amplitude 1.5 mm Incorrect Operate 10-55 Hz Amplitude 1.0 mm
Contact Resistance	Less than 50 mΩ	Shock Resistance	Incorrect Operate 10G
Operate Time	ab. 5.5 ms (at nominal voltage)	Mechanical Life Expectancy	More than 10,000,000 times
Release Time	ab. 2 ms (at nominal voltage)	Electrical Life Expectancy	More than 100,000 times
Dielectric Strength	AC 1,500V, 50/60 Hz p.m.	Max. Operation	Electrical: 1,800 times/hour Mechanical: 18,000 times/hour
Insulation Resistance	More than 100MΩ at DC 500V	Weight	8.5 grs.
Temperature range	-25°C to +55°C (non-condensing)		
Temperature rise	Less than 40 deg (at nominal voltage)		

Original *Original Electric Mfg. Co., Ltd.*

TYPE SRW

LOW COST.
HIGHLY RELIABLE

MINIATURE WIDE VARIETY POWER SRW RELAY



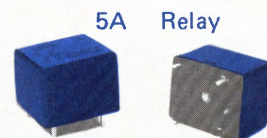
SRW

ACTUAL SIZE 5A RELAY

This SRW Series Relay was developed to satisfy users' wide application with small installation area on P. C. Board, low cost and wide contact capacity, from our long experience for development of small installation space original Relays.

This SRW Series Relay is popularly applicable to control devices and equipments, automobiles, vending machines, household apparatus, etc. in the output circuit, because of high reliability and performance.

This Series Relay offers wide contact capacity of 3A (SRW) with contact element of Ag, 5A (SRWH) with AgCdO on 1 transfer (SPDT) P. C. Board Relay, and can switch large current with small installation space. Outside construction consists of complete Anti-flux type (SRW-S) and complete hermetically sealed type (SRW-SH). SRW-SH type is washable after mounted on P.C. Board



Main Features:

1. High performance low cost 1 transfer (SPDT) P. C. Board Use Relay
2. Ultra miniature size (18.3mm x 15.2mm x 13.4mm) and light weight
3. High dielectric strength
4. The design conforms to UL, CSA, VDE, etc. in high performance
5. Complete Anti-flux construction (SRW-S) offers high and long reliability, and effective productivity
6. Long service life of electrically 100,000 cycles and mechanically 10,000,000 cycles

ORDERING CODE

S R W H - S - 1 1 2 D M 1

Type

Non-Indication : for 3A

H: 5A

S: Anti flux type

SH: Hermetic Sealed type

Nominal Voltage

103D: 3VDC
106D: 6VDC
109D: 9VDC
112D: 12VDC
124D: 24VDC
148D: 48VDC

Contact Material

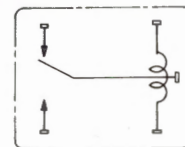
Non-Indication: Ag
1: AgCdO

Non-Indication: 1 Transfer

M: 1 Make Contact

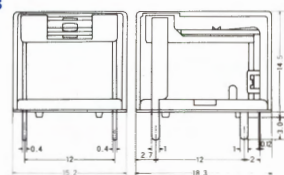
B: 1 Break Contact

Connection Diagram



Dimensions

SRW-S



Printed Circuit Diagram

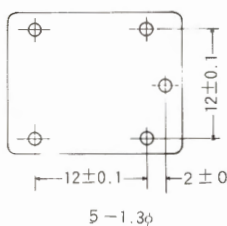


Fig. 1 Coil Temp. Rise Vs Coil Power

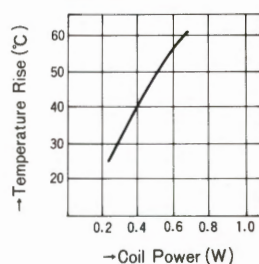


Fig. 2 Time Values Vs Coil Power

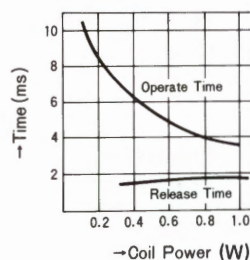
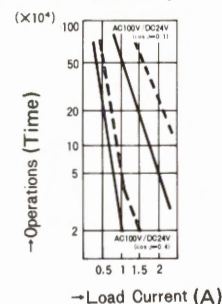


Fig. 3 Life Expectancy



Nominal Coil

Nominal Voltage (V)	Nominal Current (mA)		Coil Resistance (Ω) $\pm 10\%$		Pull-In Voltage (V)	Drop-Out Voltage (V)	Max. Continuous Rated Voltage (V)
	SRW-S	SRWH-S	SRW-S	SRWH-S			
DC 3	120	150	25	20	less than 75% of coil voltage	more than 10% of coil voltage	140% of coil voltage
DC 6	60	75	100	80			
DC 9	40	50	225	180			
DC 12	30	37.5	400	320			
DC 24	15	19	1,600	1,280			

Remark: The above values are at 20°C

Contact Capacity and Contact Materials

			SRW-S or -SH	SRWH-S or -SH
Contact Capacity	Resistive Load	AC 120V/DC 24V $\cos \phi = 1$	3	5
	Inductive Load	AC 120V/DC 24V $\cos \phi = 0.4$	1.5	3
Contact Material			Ag	AgCdO

Specification

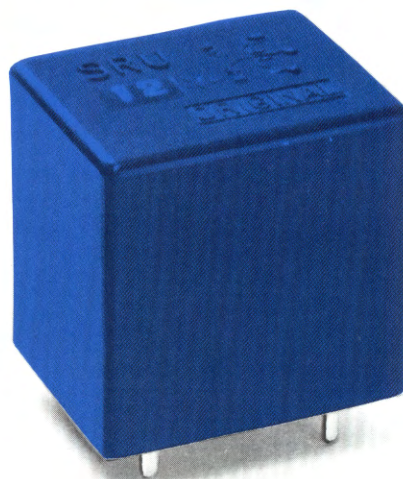
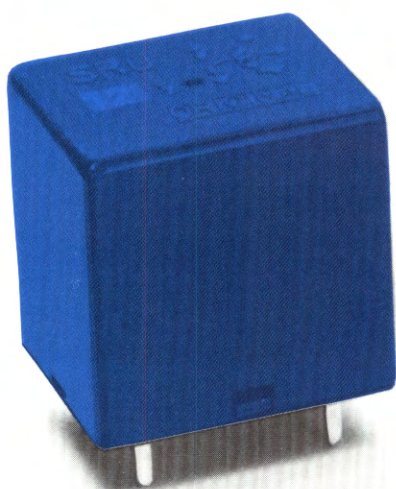
Coil power Consumption (at nominal voltage)	0.36W, 0.45W	Vibration Resistance	Vibration 10-55Hz Amplitude 1.5 mm Incorrect Operate 10-55Hz Amplitude 1.0 mm
Contact Resistance	Less than 50 m Ω	Shock Resistance	Incorrect Operate 10G
Operate Time	ab. 7 ms (at nominal voltage)	Mechanical Life Expectancy	More than 10,000,000 times
Release Time	ab. 2 ms (at nominal voltage)	Electrical Life Expectancy	More than 100,000 times
Dielectric Strength	AC 1,000V, 50/60 Hz p.m.	Max. Operation	Electrical: 1,800 times/hour Mechanical: 18,000 times/hour
Insulation Resistance	More than 100 M Ω at DC 500V	Weight	6 grs.
Temperature range	-25°C to +55°C (non-condensing)		
Temperature rise	Less than 30 deg (at nominal voltage)		

Original *Original Electric Mfg. Co., Ltd.*

TYPE SRU

LOW COST.
HIGHLY RELIABLE

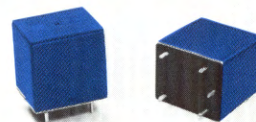
MINIATURE WIDE VARIETY POWER SRU RELAY



This SRU Series Relay was developed to satisfy users' wide application with small installation area on P. C. Board, low cost and wide contact capacity, from our long experience for development of small installation space Relays.

This SRU Series Relay is popularly applicable to control devices and equipments, automobiles, vending machines, household apparatus, etc. in the output circuit, because of high reliability and performance.

This Series Relay offers wide contact capacity of 3A (SRU) with contactelement of Ag, 7A (SRUH) with AgCdO and 13A (SRUDH) with AgCdO on 1 transfer (SPDT) P. C. Board Relay, and can switch large current with small installation space. Outside construction consists of standard encased type (SRU), complete Anti-flux type (SRU-S) and complete hermetically sealed type (SRU-SH). SRU-SH type is washable after mounted on P. C. Board.



Main Features:

1. High performance low cost 1 transfer (SPDT) P. C. Board Use Relay
2. Ultra miniature size (19.3mm x 15.6mm x 19mm) and light weight (10 grams)
3. High dielectric strength covering more than 1500VAC
4. The design conforms to UL, CSA, VDE, etc. in high performance
5. Complete Anti-flux construction (SRU-S) offers high and long reliability, and effective productivity
6. Long service life of electrically 100,000 cycles and mechanically 10,000,000 cycles

TYPE SRU LOW COST. HIGHLY RELIABLE

Original

Original Electric Mfg. Co., Ltd.

ORDERING CODE

S R U H - S - 1 1 2 D M 1

Type

Non-Indication : for 3A

H: for 7A

DH: for 13A

S: Anti flux type

SH: Hermetic Sealed type

Nominal Voltage

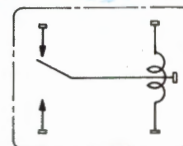
103D: 3VDC
106D: 6VDC
109D: 9VDC
112D: 12VDC
124D: 24VDC
148D: 48VDC

Contact Material

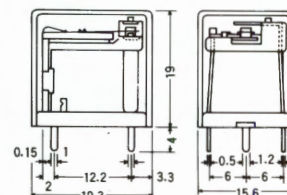
Non-Indication: Ag
1: AgCdO

Non-Indication: 1 Transfer
M: 1 Make Contacts
B: 1 Break Contacts

Connection Diagram



Dimensions



Printed Circuit Diagram

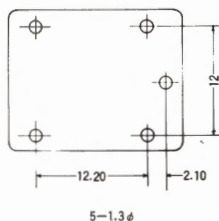


Fig. 1 Coil Temp. Rise Vs Coil Power

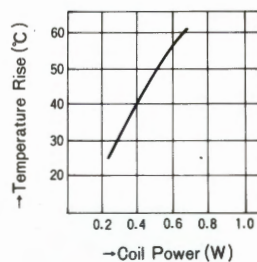


Fig. 2 Time Values Vs Coil Power

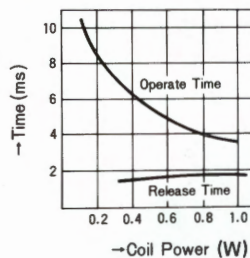
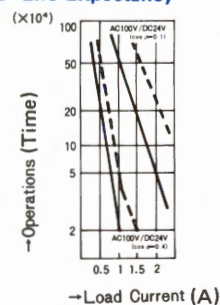


Fig. 3 Life Expectancy



Nominal Coil

Nominal Voltage (V)	Nominal Current (mA)		Coil Resistance (Ω)		Pull-In Voltage (V)	Drop-Out Voltage (V)	Max. Continuous Rated Voltage (V)
DC 3	120	150	25	20	less than 75% of nominal voltage	more than 10% of nominal voltage	140% of nominal voltage
DC 6	60	75	100	80			
DC 9	40	50	225	180			
DC 12	30	37.5	400	320			
DC 24	15	19	1,000	1,280			
DC 48	10	13.7	4,800	3,500			

Remark: The above values are at 20°C

Contact Capacity and Contact Materials

			SRU	SRU-H	SRU-DH
Contact Capacity	Resistive Load	AC 120V/DC 24V cos φ = 1	3	7	13
	Inductive Load	AC 120V/DC 24V cos φ = 0.4	1.5	3.5	6.5
Contact Material			Ag	AgCdO	AgCdO

Specification

Coil power Consumption (at nominal voltage)	0.36W, 0.45W	Vibration Resistance	Vibration 10-55Hz Amplitude 1.5 mm Incorrect Operate 10-55 Hz Amplitude 1.0 mm
Contact Resistance	Less than 50 mΩ	Shock Resistance	Incorrect Operate 10G
Operate Time	ab. 7 ms (at nominal voltage)	Mechanical Life Expectancy	More than 10,000,000 times
Release Time	ab. 2 ms (at nominal voltage)	Electrical Life Expectancy	More than 100,000 times
Dielectric Strength	AC 1,500V, 50/60 Hz p.m.	Max. Operation	Electrical: 1,800 times/hour Mechanical: 18,000 times/hour
Insulation Resistance	More than 100 MΩ at DC 500V	Weight	10 grs.
Temperature range	-25°C to +55°C (non-condensing)		
Temperature rise	Less than 30 deg (at nominal voltage)		

Original

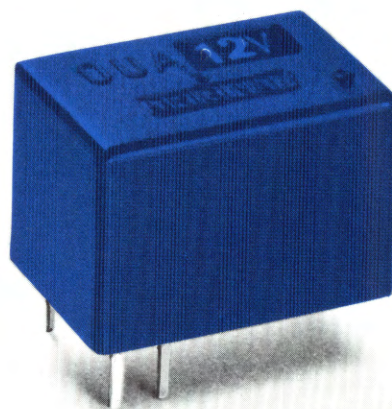
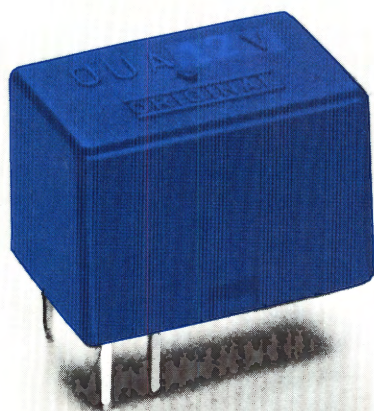
Original Electric Mfg. Co., Ltd.

Kida Bldg., 2-13, 1-Chome, Yushima, Bunkyo-ku, Tokyo, Japan.
Tel: Tokyo (255) 2984 Telex: Tokyo (222) 4650 Cable Address "OLRIC MFG" TOKYO

TYPE OUA

LOW COST.
HIGHLY RELIABLE

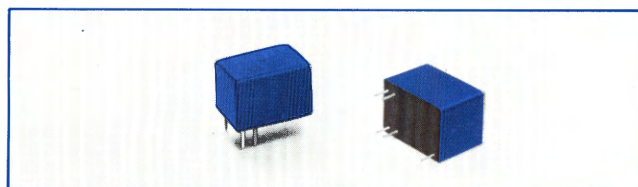
ULTRA MINIATURE HIGH PERFORMANCE OUA RELAY



This OUA Series Relay has ultra miniature size enough to be perfect for high density packaging despite high reliability and low cost, and also offers smaller installation space on P. C. Board. Furthermore, this OUA Series Relay has most rationalized shape and mechanism, enough improved magnetic circuits and also larger value of coil constant ($G_c = N^2/R$) to offer high reliability and on wide applications.

The Relay specified OUA is 1 transfer (SPDT) contact type Relay with P. C. Board terminals to meet I. C. Pitch of 2.54 mm, and prepares 3 types of outside case construction of standard encased type (OUA), complete Anti-flux type (OUA-S) and complete hermetically sealed type (OUA-SH).

Contact element employs Ag system for 2A use, AgCdO system for 3A use and AgPd-Aup system for dry circuits use of crossbar type construction to satisfy wide variety applications like office equipments, business machines, vending machines, various control devices and equipments, security equipments, gas detectors, automobiles, etc.



Main Features:

1. High performance low cost 1 transfer (SPDT) P.C. Board Use Relay
2. Ultra miniature size (14.8mm x 9.8mm x 10mm) and light weight (3.2 grams)
3. Employment of I. C. Pitch of 2.54mm with Grid Terminal Arrangement
4. Complete Anti-flux construction (OUA-S) offering high performance and effective productivity
5. Most simplified shape and mechanism to meet massproduction process.
6. Capacity in magnetic circuit is designed to have minimum value by high density packaging
7. Long service life of electrically 100,000 cycles and mechanically 10,000,000 cycles

ORDERING CODE

** REMARKS **

In case you require your own specs., please contact us.
We may arrange your specs., for our acceptance.

O U A - S - 1 1 2 D M 1

Type

S: Anti flux type
SH: Hermetic Sealed type

Nominal Voltage

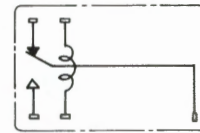
103D: 3VDC
106D: 6VDC
109D: 9VDC
112D: 12VDC
124D: 24VDC

Contact Material

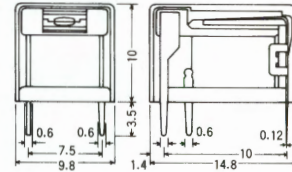
Non-Indication: Ag
1: AgCdO
2: AgPd-Aup

Non-Indication: 1 Transfer
M: 1 Make contact
B: 1 Break contact

Connection Diagram



Dimensions



Printed Circuit Diagram

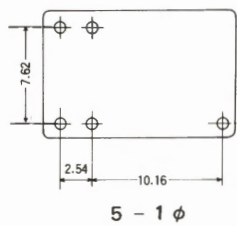


Fig. 1 Coil Temp. Rise Vs Coil Power

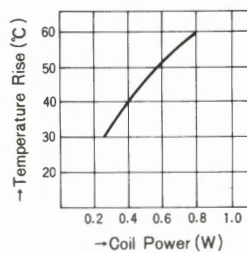


Fig. 2 Time Values Vs Coil Power

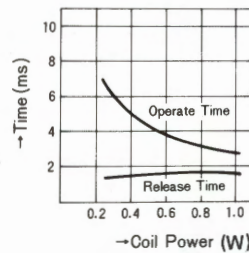
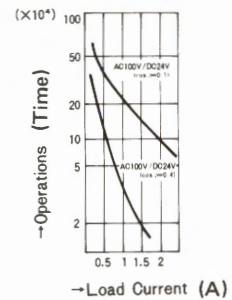


Fig. 3 Life Expectancy



Nominal Coil

Nominal Voltage (V)	Nominal Current (mA)	Coil Resistance (Ω)	Pull-In Voltage (V)	Drop-Out Voltage (V)	Max. Continuous Rated Voltage (V)
DC 3	120	25	less than 75% of nominal voltage	more than 10% of nominal voltage	130% of nominal voltage
DC 6	60	100			
DC 9	40	225			
DC 12	30	400			
DC 24	15	1,600			

Remark: The above values are at 20°C

Contact Capacity and Contact Materials

Contact	Resistive Load	AC 120V/DC 24V $\cos \phi = 1$	OUA	OUA-□-□ 1	OUA-□-□ 2 (Cross-bar)
Capacity	Inductive Load	AC 120V/DC 24V $\cos \phi = 0.4$	2	3	1
Contact Material			Ag	AgCdO	AgPd-Aup

Specification

Coil power Consumption (at nominal voltage)	0.36W	Vibration Resistance	Vibration 10-55 Hz Amplitude 1.5 mm Incorrect Operate 10-55 Hz Amplitude 1.0 mm
Contact Resistance	Less than 50 mΩ	Shock Resistance	Incorrect Operate 10G
Operate Time	ab. 4 ms (at nominal voltage)	Mechanical Life Expectancy	More than 10,000 times
Release Time	ab 1.5 ms (at nominal voltage)	Electrical Life Expectancy	More than 100,000 times
Dielectric Strength	AC 500V, 50/60 Hz p.m.	Max. Operation	Electrical: 1,800 times/hour Mechanical: 18,000 times/hour
Insulation Resistance	More than 100 MΩ at DC 500V	Weight	3.3 grs.
Temperature range	-25°C + 55°C (non-condensing)		
Temperature rise	Less than 36 deg (at nominal voltage)		

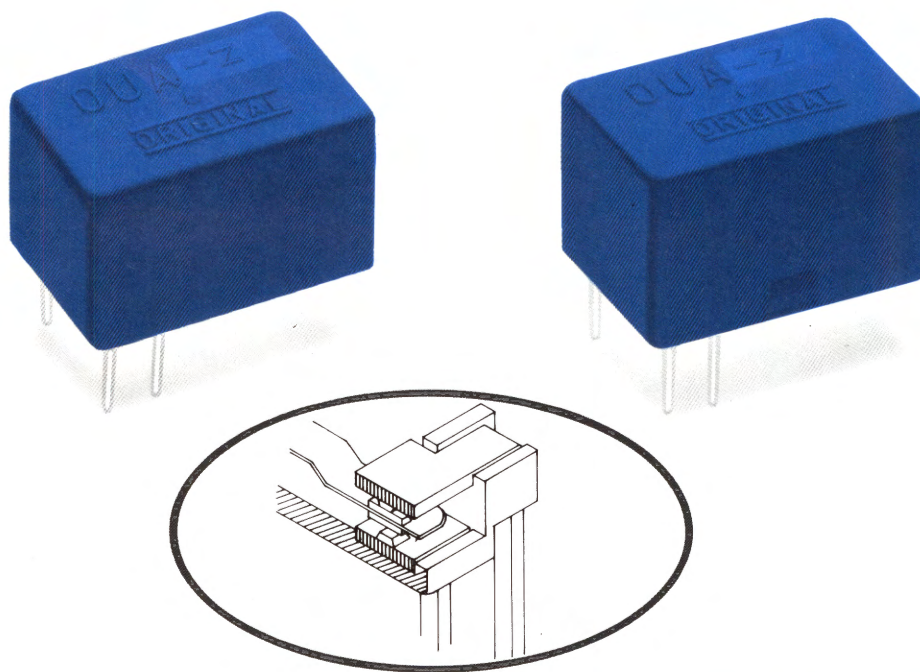
Original Original Electric Mfg. Co., Ltd.

TELEPHONE
RELAY

TYPE OUA-Z

LOW COST.
HIGHLY RELIABLE

ULTRA MINIATURE HIGH PERFORMANCE OUA-Z RELAY



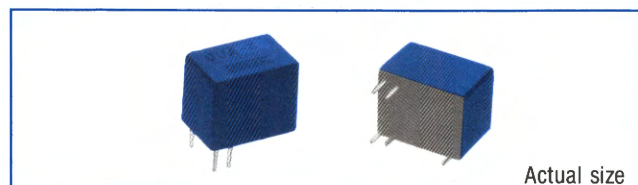
This OUA-Z Series Relay has ultra miniature size enough to be perfect for high density packaging despite high reliability and low cost, and also offers smaller installation space on P. C. Board. Furthermore, this OUA-Z Series Relay has most rationalized shape and mechanism, enough improved magnetic circuits and also larger value of coil constant ($G_c = N^2/R$) to offer high reliability and on wide applications.

The Relay specified OUA-Z is 1 transfer (SPDT) contact type Relay with P. C. Board terminals to meet I. C. Pitch of 2.54 mm, and prepares 2 types of outside case construction of standard enclosed type (OUA-Z) complete Anti-flux type (OUA-Z-S) and complete hermetically sealed type (OUA-Z-SH).

Contact element employs AgPd-Aup system for dry circuits use of crossbar type construction to satisfy wide variety applications like telephone office equipments, business machines, vending machines, various control devices and equipments, security equipments, gas detectors, automobiles, etc.

OUA-Z Series Relay prepares two Kinds of application:

OUA-Z is for general use and OUA-ZL is for high sensitivity use.



Actual size

Main Features:

1. High performance low cost 1 transfer (SPDT) P.C.Board Use Relay
2. Ultra miniature size (14.8mmx9.8mmx10.5mm) and light weight (3.2 grams)
3. Employment of I. C. Pitch of 2.54mm with Grid Terminal Arrangement
4. Complete Anti-flux construction (OUA-ZS) offering high performance and effective productivity
5. Most simplified shape and mechanism to meet massproduction process.
6. Capacity in magnetic circuit is designed to have minimum value by high density packaging
7. Long service life of electrically 500,000 cycles and mechanically 20,000,000 cycles

TYPE OUA-Z

LOWCOST.
HIGHLY
RELIABLE

Original

Original Electric Mfg. Co., Ltd.

ORDERING CODE

••REMARKS••

In Case you require your own specs., please contact us.
We may arrange your specs., for our acceptance.

OUA - Z S - 1 1 2 L M

Type

S: Anti flux type
SH: Hermetic Sealed type

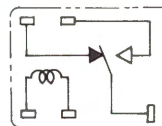
Nominal Voltage

103D: 3VDC
106D: 6VDC
109D: 9VDC
112D: 12VDC
124D: 24VDC

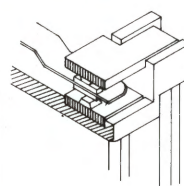
Non-Indication: 1 Transfer
M: 1 Make contact
B: 1 Break contact

Coil Resistance
D: Standard
L: High Sensitive

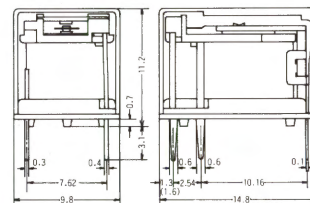
Connection Diagram



Dimensions



OUA-ZS



Printed Circuit Diagram

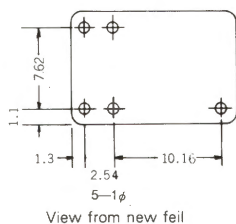


Fig. 1 Coil Temp. Rise Vs Coil Power

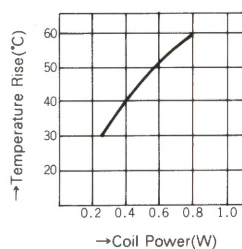


Fig. 2 Time Values Vs Coil Power

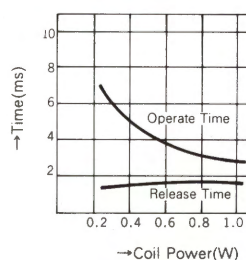
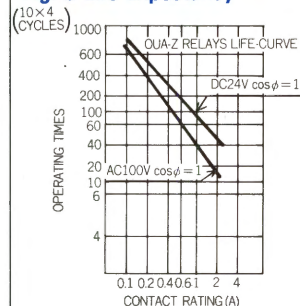


Fig. 3 Life Expectancy



Nominal Coil

Nominal Coil Voltage(V)	Coil Resistance(Ω) ± 10%		Pull-in Voltage(V)	Drop-Out Voltage(V)	Max. Continuous Rated Voltage(V)
	OUA-Z	OUA-ZL			
DC 3	20	45	70% Max. of nominal voltage	10% Min. of nominal voltage	130% of nominal voltage
DC 6	80	180			
DC 9	180	400			
DC12	320	700			
DC24	1,280	2,800			

Remark: The above values are at 20°C. If other Nominal coil voltage will be required, please contact us.

Contact Capacity and Contact Materials

			OUA-Z
Contact Capacity	Resistive Load	AC 120V / DC 24 $\cos\phi = 1$	1
	Inductive Load	AC 120V / DC 24 $\cos\phi = 0.4$	0.3
Contact Material			AgPd-AuP

Specification

Coil Power	OUA-Z abt. 0.45W	Vibration Resistance	10 - 55Hz(Dual Amplitude 1.5mm)
Consumption (at nominal Voltage)	OUA-ZL abt. 0.2W	Shock Resistance	OUA-Z 10G OUA-ZL 6G
Contact Resistance	Less than 50 m	Mechanical Life Expectancy	More than 20,000,000 ops.
Operate Time	OUA-Z abt. 3.5ms(at nominal voltage) OUA-ZL abt. 6.0ms (at nominal voltage)	Electrical Life Expectancy	More than 500,000 ops.
Release Time	OUA-Z & OUA-ZL abt. 1 ms.(at nominal voltage)	Max. Repeat Operation	OUA-Z 100 pulse per second OUA-ZL 60 pulse per second
Dielectric Strength:	AC 500V(50/60Hz) for 1 minute	Weight :	3.3 grs.
Insulation Resistance	More than 100 M at DC 500V		
Temperature Range	OUA-Z -30°C - +55°C OUA-ZL -30°C - +75°C		
Temperature Rise	Less than 36 deg(at nominal voltage)		

Original

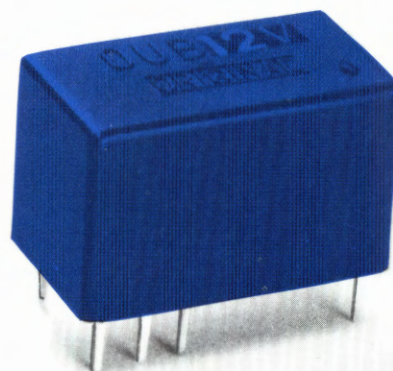
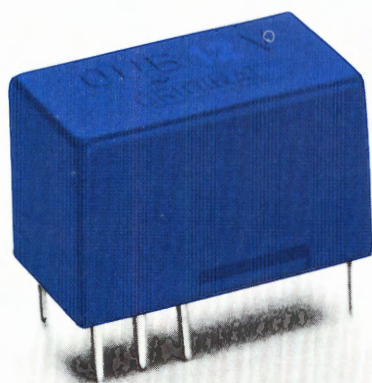
Original Electric Mfg. Co., Ltd.

Kida Bldg., 2-13, 1-Chome, Yushima, Bunkyo-ku, Tokyo, Japan,
Tel: Tokyo (255) 2984 Telex: Tokyo (222) 4650 Cable Address OLRIC MFG TOKYO

TYPE OUB

**LOW COST.
HIGHLY RELIABLE**

ULTRA MINIATURE HIGH PERFORMANCE AND RELIABILITY OUB RELAY

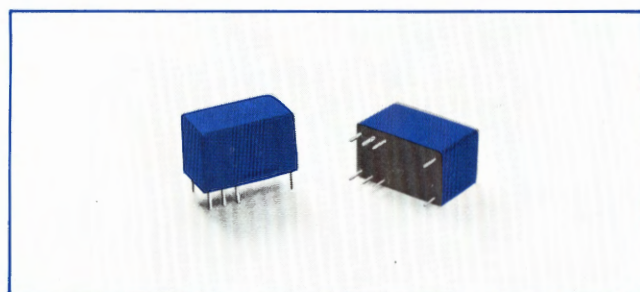


This OUB Series Relay has very rationalized shape and construction in high density packaging to meet massproduction process to offer high reliability and performance despite low cost and small installation space factor. 2 transfer (DPDT) Relay has been requiring complex construction being necessary for much process of assembling and adjusting method on production. Therefore, such complex construction has been causing the problems in reliability and cost.

To solve such problems, Original Electric Mfg. Co. employed own developed rationalized design on Moving and Fixed contact construction to meet massproduction assembling method and also improved the relative magnetic circuits and coil constant ($G_c = N^2/R$) to get larger value than before. Then, OUB Series Relay can offer most rationalized shape and construction against present existing 2 transfer Relays despite high reliability and low cost.

This OUB Series Relay is 2 transfer (DPDT) low cost ultraminiature Relay with P. C. Board Terminals and prepares 3 types of outside case construction of standard type (OUB), complete Anti-flux type (OUB-S) and complete hermetically sealed type (OUB-SH). Contact elements are arranged at Ag contact system for 2A use, and AgCdO for 3A use.

The Relay specified OUB is applicable to office equipments, business machines, vending machines, various control devices and equipments, security equipments, gas detectors, automobiles, wire less communications, etc.



Main Features:

1. High performance low cost 2 transfer (DPDT) P. C. Board Use Relay
2. Ultra miniature size (17.5mm x 9.8mm x 11mm) and light weight (3.5 grams)
3. Complete Anti-flux construction (OUB-S) offering high performance and effective productivity
4. Most simplified shape and mechanism to meet massproduction process
5. Capacity in magnetic circuits is designed to have minimum value in high density packaging
6. Employment of I. C. Pitch of 2.54mm to meet 16 Pins I. C. Socket
7. Long service life of electrically 100,000 cycles and mechanically 10,000,000 cycles

**** REMARKS ****

In case you require your own specs., please contact us.
We may arrange your specs., for our acceptance.

ORDERING CODE

O U B - S - 2 1 2 D M 1

Type

S: Anti flux type
SH: Hermetic Sealed type

Rated voltage

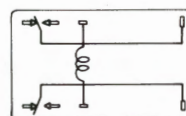
203D: 3VDC
206D: 6VDC
209D: 9VDC
212D: 12VDC
224D: 24VDC

Contact Material

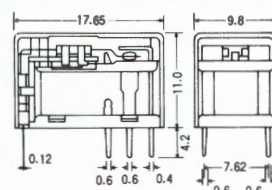
Non-Indication: Ag
1: AgCdO

Non-Indication: 2 Transfer
M: 2 Make contacts
B: 2 Break contacts

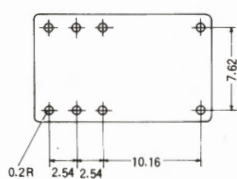
Connection Diagram



Dimensions



Printed Circuit Diagram



8-1 φ

Fig. 1 Coil Temp. Rise Vs Coil Power

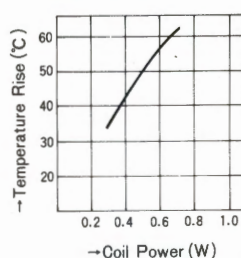


Fig. 2 Time Values Vs Coil Power

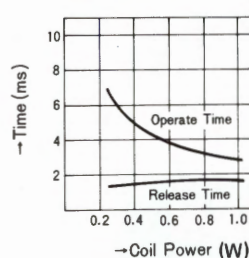
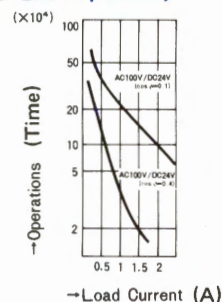


Fig. 3 Life Expectancy



Nominal Coil

Nominal Voltage (V)	Nominal Current (mA)	Coil Resistance (Ω)	Pull-In Voltage (V)	Drop-Out Voltage (V)	Max. Continuous Rated Voltage (V)
DC 3	150	20	less than 75% of nominal voltage	more than 10% of nominal voltage	130% of nominal voltage
DC 6	75	80			
DC 9	50	180			
DC 12	37.5	320			
DC 24	19	1,280			

Remark: The above values are at 20°C

Contact Capacity and Contact Materials

Contact Capacity	Resistive Load	AC 120V/DC 24V $\cos \phi = 1$	OUB	UUB-□-□ 1
	Inductive Load	AC 120V/DC 24V $\cos \phi = 0.4$		
Contact Material			Ag	AgCdO

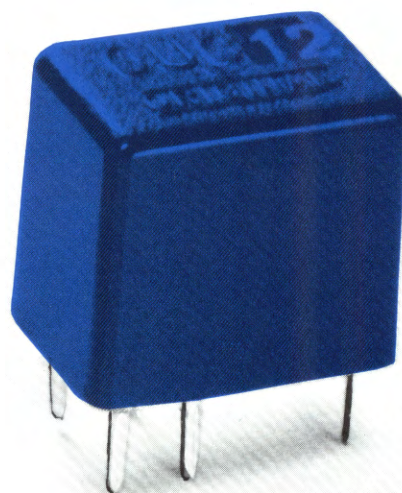
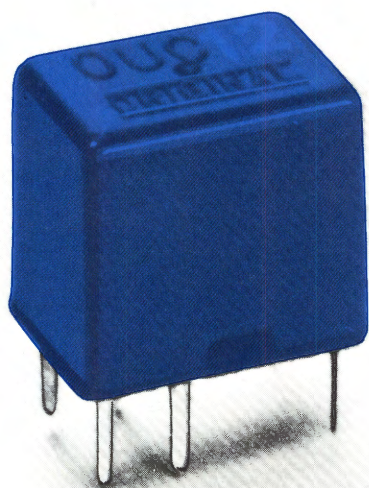
Specification

Coil power Consumption (at nominal voltage)	0.45W	Vibration Resistance	Vibration 10-55Hz Amplitude 1.5 mm Incorrect Operate 10-55 Hz Amplitude 1.0 mm
Contact Resistance	Less than 50mΩ	Shock Resistance	Incorrect Operate 10G
Operate Time	ab. 5 ms (at nominal voltage)	Mechanical Life Expectancy	More than 10,000,000 times
Release Time	ab. 1.8 ms (at nominal voltage)	Electrical Life Expectancy	More than 100,000 times
Dielectric Strength	AC 500V, 50/60Hz p.m.	Max. Operation	Electrical: 1,800 times/hours Mechanical: 18,000 times/hours
Insulation Resistance	More than 100MΩ at DC 500V	Weight	3.5 grs.
Temperature range	-25°C to +55°C (non-condensing)		
Temperature rise	Less than 40deg (at nominal voltage)		

TYPE OUC

LOW COST.
HIGHLY RELIABLE

SUPER ULTRA MINIATURE HIGH PERFORMANCE OUC RELAY

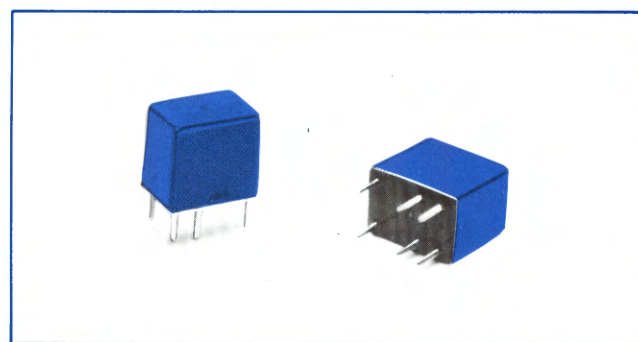


This OUC Series Relay was developed by Original Electric Mfg. Co.'s all technical ability that was cultivated in Electromechanical Relay manufacture for longer period than 20 years, and now offers the smallest size of present existing Relays, of course, in the world despite high performance and reliability.

Original Electric Mfg. Co. have been striving to develop High Cost Performance and High Density Packaging Relays to comply with miniaturization of control devices and equipments and with tendency of synthesized electronic circuits by large scale integrated circuits. From our above mentioned continuous intention, this OUC Series Relay was successfully commercialized to coexist with such tendency of miniaturization of control devices and of electronic circuits.

This Relay specified OUC is 1 transfer (SPDT) Relay which can control load current by 2A despite smallest size in the world. This high performance was realized by improved magnetic circuits and large value of coil constant ($G_c = N^2/R$) and extremely rationalized shape and construction to meet massproduction process.

Contact element employs Ag System for high performance. This Series Relay prepares 3 types of outside case construction of standard encased type (OUC), complete Anti-flux type (OUC-S) and complete hermetically sealed washable type (OUC-SH) to meet wide variety applications like electronic toys, business machines, office equipments, various control devices and equipments, security equipments, household devices, automobiles, etc.



Main Features:

1. High performance low cost 1 transfer (SPDT) P.C. Board Use Relay
2. The smallest size (0.7mm x 6.8mm x 8.5mm) in the world and light weight (1.7 grams)
3. High performance covering load current by 2A
4. Complete Anti-flux construction (OUC-S) offering high performance and effective productivity
5. Most simplified mechanism to offer high performance and reliability by massproduction process despite low cost
6. Capacity in magnetic circuit is designed to have minimum value by high density packaging
7. Long service life of electrically 100,000 cycles and mechanically 10,000,000 cycles

ORDERING CODE

OUC - S - 112 D M 1

Type

S: Anti flux type
SH: Hermetic Sealed type

103D: 3VDC
106D: 6VDC
109D: 9VDC
112D: 12VDC
124D: 24VDC

Contact Material

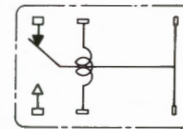
Non-Indication: Ag
1: Ag-Aup

Non-Indication: 1 Transfer
M: 1 Make contact
B: 1 Break contact

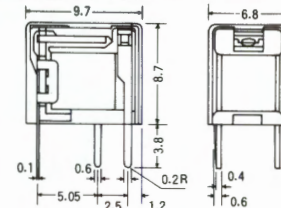
Nominal Voltage

** REMARKS **
In case you require your own specs., please contact us.
We may arrange your specs., for our acceptance.

Connection Diagram



Dimensions



Printed Circuit Diagram

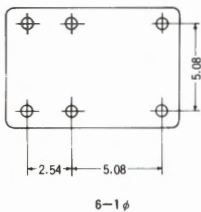


Fig. 1 Coil Temp. Rise Vs Coil Power

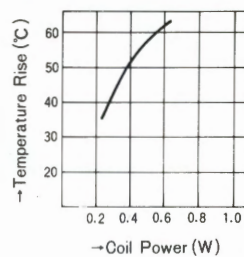


Fig. 2 Time Values Vs Coil Power

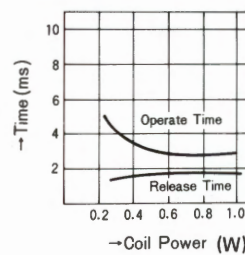
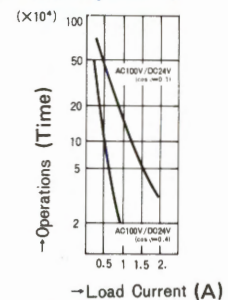


Fig. 3 Life Expectancy



Nominal Coil

Nominal Voltage (V)	Nominal Current (mA)	Coil Resistance (Ω)	Pull-In Voltage (V)	Drop-Out Voltage (V)	Max. Continuous Rated Voltage (V)
DC 3	150	20	less than 80% of nominal voltage	more than 10% of nominal voltage	120% of nominal voltage
DC 6	75	80			
DC 9	50	180			
DC 12	37.5	320			
DC 24	24	1,000			

Remark: The above values are at 20°C

Contact Capacity and Contact Material

			OUC	OUC-□-□ 1
Contact Capacity	Resistive Load	AC 100V/DC 24V $\cos \phi = 1$	2	1
	Inductive Load	AC 100V/DC 24V $\cos \phi = 0.4$	1	0.5
Contact Material			Ag	Ag-Aup

Specification

Coil power Consumption (at nominal voltage)	0.45 W	Vibration Resistance	Vibration 10-55Hz Amplitude 1.5 mm Incorrect Operate 10-50Hz Amplitude 1.0 mm
Contact Resistance	Less than 50 mΩ	Shock Resistance	Incorrect Operate 10G
Operate Time	ab. 3.5 ms (at nominal voltage)	Mechanical Life Expectancy	More than 10,000,000 times
Release Time	ab. 1.8 ms (at nominal voltage)	Electrical Life Expectancy	More than 100,000 times
Dielectric Strength	AC 500V, 50/60 Hz p.m.	Max. Operation	Electrical: 1,800 times/hours Mechanical: 18,000 times/hours
Insulation Resistance	More than 100 MΩ at DC 500V	Weight	1.7 grs.
Temperature range	-25°C to +55°C (non-condensing)		
Temperature rise	Less than 50 deg (at nominal voltage)		

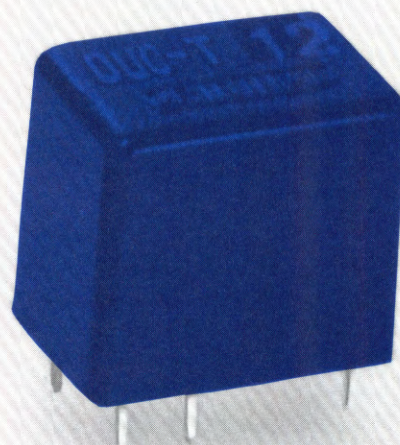
TYPE OUC-T

LOW COST.
HIGHLY RELIABLE

SUPER ULTRA MINITELEPHONE RELAY



ACTUAL SIZE

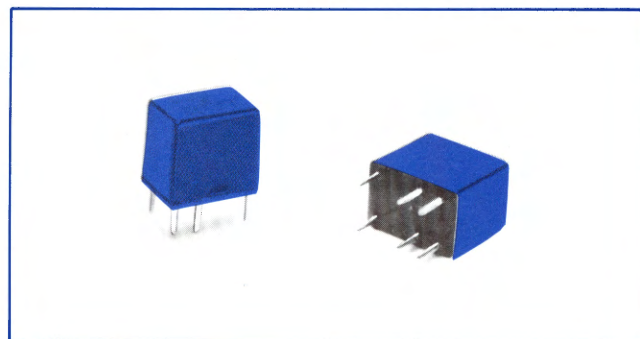


This OUC Series Relay was developed by Original Electric Mfg. Co.'s all technical ability that was cultivated in Electromechanical Relay manufacture for longer period than 20 years, and now offers the smallest size of present existing Relays, of course, in the world despite high performance and reliability.

Original Electric Mfg. Co. have been striving to develop High Cost Performance and High Density Packaging Relays to comply with miniaturization of control devices and equipments and with tendency of synthesized electronic circuits by large scale integrated circuits. From our above mentioned continuous intention, this OUC Series Relay was successfully commercialized to coexist with such tendency of miniaturization of control devices and of electronic circuits.

This Relay specified OUC-T is x-bar contact type Relay which can control load current by 1A despite smallest size in the world. This high performance was realized by improved magnetic circuits and large value of coil constant ($G_c = N^2/R$) and extremely rationalized shape and construction to meet massproduction process.

Contact element employs Ag Pd-Aup System for high performance. This Series Relay prepares 2 types of complete Anti-flux type (OUC-S) and complete hermetically sealed washable type (OUC-SH) to meet wide variety applications like business machines, office equipment, various control devices and equipment, security equipment, telecommunication equipment.



Main Features:

1. High performance low cost 1 transfer (SPDT) x-bar contact type P.C. Board Use Relay
2. The smallest size (0.7mm x 6.8mm x 8.5mm) in the world and light weight (1.7 grams)
3. High performance covering load current by 1A
4. Complete Anti-flux construction (OUC-S) offering high performance and effective productivity
5. Most simplified mechanism to offer high performance and reliability by massproduction process despite low cost
6. Capacity in magnetic circuit is designed to have minimum value by high density packaging
7. Long service life of electrically 10,000,000 cycles and mechanically 50,000,000 cycles

TYPE OUC-T LOW COST. HIGHLY RELIABLE

Original

Original Electric Mfg. Co., Ltd.

ORDERING CODE

** REMARKS **
In case you require your own specs., please contact us.
We may arrange your specs., for our acceptance.

OUC-T - S - 112 D M

Type

Contact Material
Ag Pd-Aup

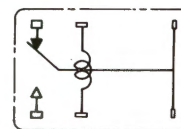
Non-Indication: 1 Transfer
M: 1 Make contact
B: 1 Break contact

Nominal Voltage

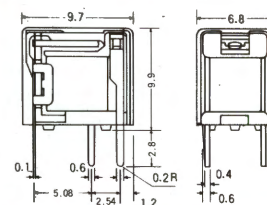
S: Anti flux type
SH: Hermetic Sealed type

103D: 3VDC
106D: 6VDC
109D: 9VDC
112D: 12VDC
124D: 24VDC

Connection Diagram



Dimensions OUC-T-S



Printed Circuit Diagram

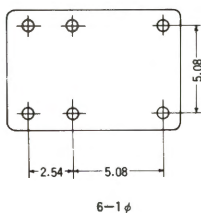


Fig. 1 Coil Temp. Rise Vs Coil Power

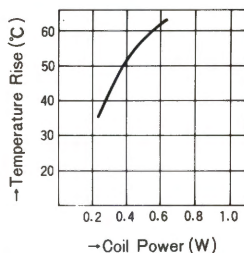


Fig. 2 Time Values Vs Coil Power

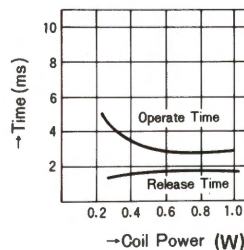
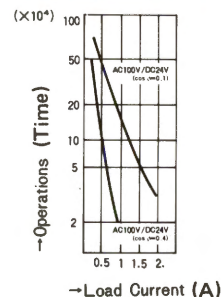


Fig. 3 Life Expectancy



Nominal Coil

Nominal Voltage (V)	Nominal Current (mA)	Coil Resistance (Ω)	Pull-In Voltage (V)	Drop-Out Voltage (V)	Max. Continuous Rated Voltage (V)
DC 3	150	20	less than 80% of nominal voltage	more than 10% of nominal voltage	120% of nominal voltage
DC 6	75	80			
DC 9	50	180			
DC 12	37.5	320			
DC 24	24	1,000			

Remark: The above values are at 20°C

Contact Capacity and Contact Material

			OUC-T
Contact Capacity	Resistive Load	AC 100V/DC 24V $\cos \phi = 1$	1
	Inductive Load	AC 100V/DC 24V $\cos \phi = 0.4$	0.5
Contact Material			Ag Pd-Aup (X-Bar)

Specification

Coil power Consumption (at nominal voltage)	0.45 W	Vibration Resistance	Vibration 10-55Hz Amplitude 1.5 mm Incorrect Operate 10-50Hz Amplitude 1.0 mm
Contact Resistance	Less than 50 mΩ	Shock Resistance	Incorrect Operate 10G
Operate Time	ab. 3.5 ms (at nominal voltage)	Mechanical Life Expectancy	More than 50,000,000 times
Release Time	ab. 1.8 ms (at nominal voltage)	Electrical Life Expectancy	More than 10,000,000 times
Dielectric Strength	AC 500V, 50/60 Hz p.m.	Max. Operation	Electrical: 1,800 times/hours Mechanical: 18,000 times/hours
Insulation Resistance	More than 100 MΩ at DC 500V	Weight	1.7 grs.
Temperature range	-25°C to +55°C (non-condensing)		
Temperature rise	Less than 50 deg (at nominal voltage)		

Original

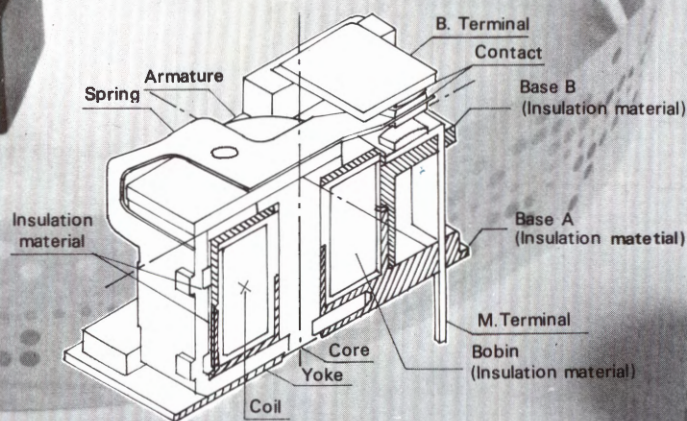
Original Electric Mfg. Co., Ltd.

Kida Bldg., 2-13, 1-Chome, Yushima, Bunkyo-ku, Tokyo, Japan.
Tel: Tokyo (255) 2984 Telex: Tokyo (222) 4650 Cable Address: "OLRIC MFG" TOKYO

TYPE OUD

LOW COST.
HIGHLY RELIABLE

DRY CIRCUIT TO 10AMP
DIELECTRIC STRENGTH 4000VAC
HIGH POWER MINIRELAY

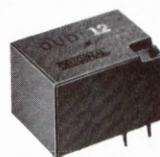


OUD types are miniature size, low cost, for printed circuit board and 1 transfer. Contact materials used are Ag or Au overlaid Ag base for dry circuit to 3A (crossbar contact) and AgCdO for 7A and 10A.

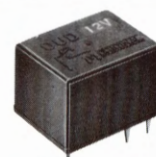
Insulation distance is kept 4.0 mm which is the widest in this miniature class, and resisting pressure of insulation is sufficiently passed AC 4000V. "High sensitivity type" and "Keep type" are also prepared in the series.

Plastic material used is passed UL standard, and insulation class is "E".

Anti-flux type (S) can completely shut flux even in soldering process by automatic soldering machine machine and Hermetic sealed type (SH) can wash in water. Thus OUD type is said a very original relay. After washing, in case of need, the inside of relay can be ventilated by taking out the knob on the case head of relay.



OUD-SH



OUD-S

▲ FEATURES

1. LOW COST, HIGHLY RELIABLE, FOR P.C. BOARD, 1 TRANSFER
2. MINIATURE SIZE: 16.0 × 21.0 × 14.2 (mm)
3. DRY CIRCUIT TO 10A
4. INSULATION DISTANCE: MORE THAN 7.5MM
5. CSA AND JAPANESE STANDARD ALLOWABLE
6. COMPLETE ANTI-FLUX AND HERMETIC SEALED TYPE.
7. UL APPROVED File No E58304

TYPE OUD

LOW COST.
HIGHLY RELIABLE

OUD
H
S
106D
M
I

Nonindication: Ag
1: AgCdO
2: Au overlaid Ag

Nonindication: 1 Transfer
M: Make contact only
B: Break contact only

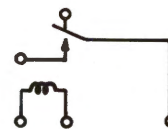
Nominal Voltage

Nonindication: for 3A
M: for 7A
H: for 10A
K: Keep type
L: High sensitive type
E: Economical type

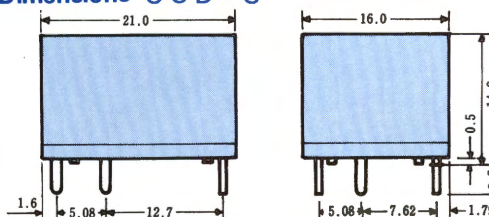
S: Anti flux type
SH: Hermetic Sealed type

103D: 3DC
 106D: 6DC
 109D: 9DC
 112D: 12DC
 124D: 24DC
 148D: 48DC

Connection Diagram



Dimensions OUD-S



Printed Circuit Diagram

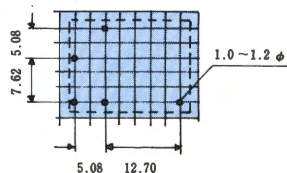


Fig. 1 Coil Temp. Rise Vs Coil Power Curve

(with Relays mounted on P.C Boards)

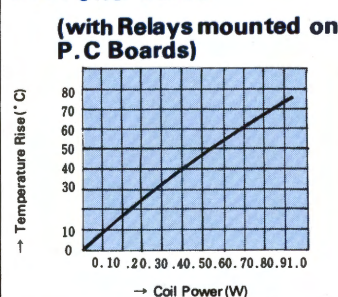


Fig. 2 Time Values Vs Coil Power Curve

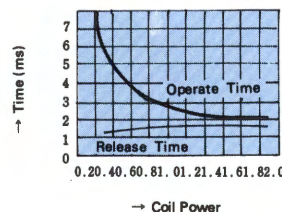
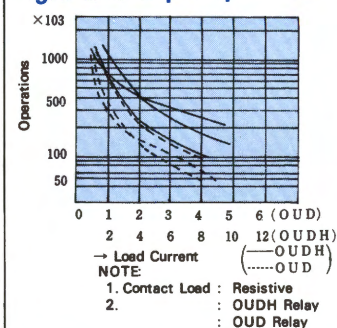


Fig. 3 Life Expancy Curve



Specification

Coil power consumption (at nominal voltage)	0.36W (OUD) 0.45W (OUDM & H)	Vibration Resistance	Durability 10-55Hz Amplitude 1.5mm Incorrect Operate 10-55Hz Amplitude 1.0mm
Contact Resistance	Less than 50mΩ		
Operate Time	ab. 6ms (at nominal voltage)	Shock Resistance	Incorrect Operate 10G
Release Time	ab. 2ms (at nominal voltage)		
Dielectric Strength	AC4000V, 50/60 Hz p.m. (between coil and contact) AC 700V, 50/60 Hz p.m. (between open contacts)	Life expectancy	Mechanical: more than 20,000,000 times
			Electrical: OUD-more than 500,000 times, OUDM-more than 100,000 times, OUDH-more than 100,000 times at nominal load.
Insulation Resistance	more than 100MΩ at DC 500V	Max. Operation	Electrical: 1,800 times/hour Mechanical: 18,000 times/hour
Temperature range	-30°C to +55°C		
Temperature rise	Less than 35deg (at nominal voltage)	Weight	8.5 grs.

Nominal

Nominal Voltage(V)	Nominal Current (mA)	Coil Resistance(Ω)	H & M	Pull-In Voltage(V)	Drop-Out Voltage(V)	Max. Continuous Rated Voltage(V)
DC3	120	25	20	less than 75% of nominal voltage	more than 10% of nominal voltage	160% of nominal voltage
DC6	60	100	80			
DC9	40	225	180			
DC12	30	400	320			
DC24	15	1600	1280			
DC48	14	3500	3500			120%

●Remark: The above values are at 20°C.

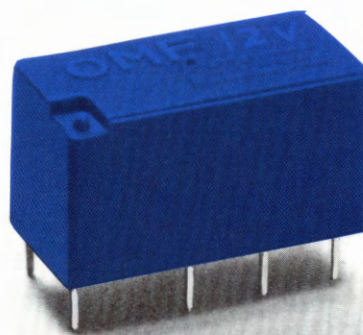
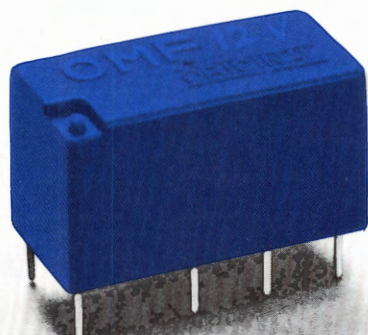
Remark: In case of High sensitive type, pull-In Voltage is less than 65% and Drop-Out Voltage is more than 6%.

		OUD	OUDM	OUDH
Contact Capacity	Resistive Load 120VAC/30VDC cos φ = 1	3	7	10
	Inductive Load 120VAC/30VDC cos φ = 0.4	15	2	3
Contact Material		AgAup	AgCdn	AgCdo

TYPE OMF

LOW COST.
HIGHLY RELIABLE

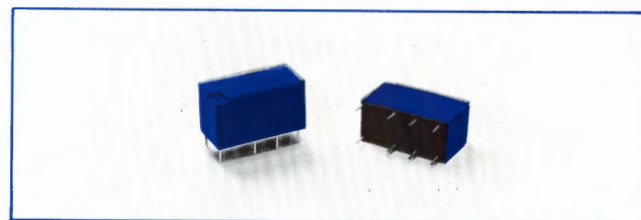
MINIATURE HIGH RELIABILITY AND PERFORMANCE COMMUNICATION OMF RELAY



This OMF Series Relay was developed to be utilized mainly to applications requiring high reliability and performance like communication equipments, Hi-Fi audio apparatus, control devices and equipments, etc. in versatile field.

This OMF Series Relay offers super ultra miniature size on 2 transfer (DPDT) contact arrangement despite high reliability and performance by massproduction process, and constitutes one remarkable type among our super ultra miniature size Series Relays.

The Terminals are arranged at inch-size of I. C. to meet 16 Pins I. C. Socket. Contact element employs AgPd-Aup system of crossbar type construction to get higher performance at low level operation. This Series Relay also offers two kinds of outside construction of Anti-flux type (OMF-S) which keeps the Relay from invading Solder flux into the Relay Case, and complete hermetically sealed type (OMF-SH) which has washable construction. OMF-SH Relay can be washable after mounted on P. C. Board, too.



Main Features:

1. Ultra miniature size high performance low cost 2 transfer (DPDT) P. C. Board Use Relay
2. Employment of I. C. Pitch to meet 16 Pins I. C. Socket
3. AgPd-Aup contact elements of crossbar type construction for higher performance at low level operation
4. Complete Anti-flux construction (OMF-S)
5. 2 makes and 2 breaks contact arrangement available if specified
6. Long service life of electrically 500,000 cycles and mechanically 10,000,000 cycles

ORDERING CODE

** REMARKS **

In case you require your own specs., please contact us.
We may arrange your specs., for our acceptance.

OMF - S - 212 D M

Type

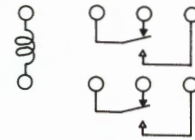
S: Anti-flux type
SH: Hermetic Sealed type

Rated voltage

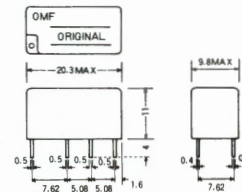
203D: 3VDC
205D: 5VDC
206D: 6VDC
209D: 9VDC
212D: 12VDC
224D: 24VDC

Non-Indication: 2 Transfer
M: 2 Make contacts
B: 2 Break contacts

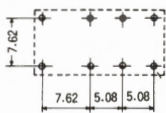
Connection Diagram



Dimensions



Printed Circuit Diagram



8-1 ϕ

Fig. 1 Coil Temp. Rise Vs Coil Power

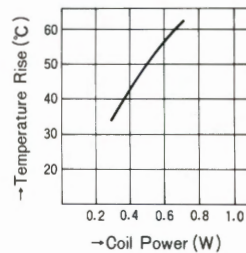


Fig. 2 Time Values Vs Coil Power

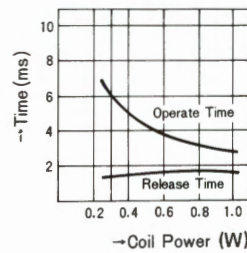
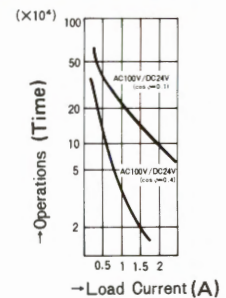


Fig. 3 Life Expectancy



Nominal Coil

Nominal Voltage (V)	Nominal Current (mA)	Coil Resistance (Ω)	Pull-In Voltage (V)	Drop-Out Voltage (V)	Max. Continuous Rated Voltage (V)
DC 3	200	15	less than 70% of nominal voltage	more than 5% of nominal voltage	120% of nominal voltage
DC 5	111	45			
DC 6	110	60			
DC 9	64	140			
DC 12	43	280			
DC 24	22	1,070			

Remark: The above values are at 20°C

Contact Capacity and Contact Materials

			OMF
Contact Capacity	Resistive Load	AC 120V/DC 28V $\cos \phi = 1$	1A
	Inductive Load	AC 120V/DC 28V $\cos \phi = 0.4$	0.5A
Contact Material			AgPd-Aup

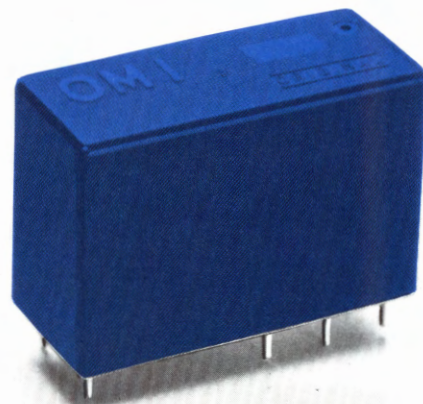
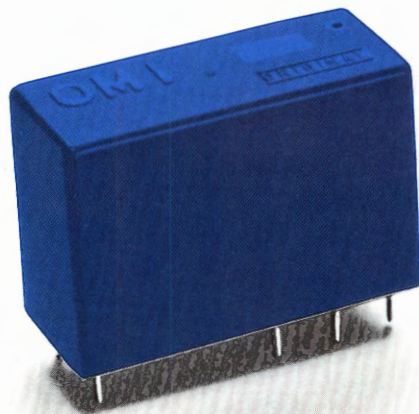
Specification

Coil power Consumption (at nominal voltage)	0.45W	Vibration Resistance	Vibration 10-55 Hz Amplitude 1.5 mm Incorrect Operate 10-55 Hz Amplitude 1.0 mm
Contact Resistance	Less than 50m Ω	Shock Resistance	Incorrect Operate 10G
Operate Time	ab. 5ms (at nominal voltage)	Mechanical Life Expectancy	More than 10,000,000 times
Release Time	ab. 1.8ms (at nominal voltage)	Electrical Life Expectancy	More than 500,000 times
Dielectric Strength	AC 500V, 50/60Hz p.m.	Max. Operation	Electrical: 1,800 times/hour Mechanical: 18,000 times/hour
Insulation Resistance	More than 100M Ω at DC 500V	Weight	3.8 grs.
Temperature range	-30°C to +50°C (non-condensing)		
Temperature rise	Less than 65deg (at nominal voltage)		

TYPE OMI

LOW COST.
HIGHLY RELIABLE

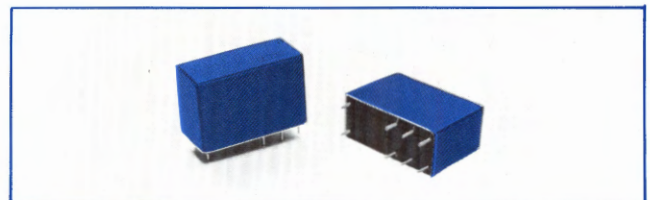
MINIATURE HIGH PERFORMANCE HIGH POWER OMI RELAY



This OMI Series Relay has smallest size enough to be perfect for high density packaging to be suitable for applications where small board space and height are requested. This OMI Series Relay also offers extremely high performance by withstanding high dielectric strength of 5000VAC and surge resistive voltage more than 10KV. This OMI Series Relay conforms to TV-3 of UL, CSA and VDE in addition to Japanese Safety Standard.

This OMI Series Relay has 2 types on contact form of 1 transfer (SPDT) and 2 transfer (DPDT) and prepares 2 types on coil sensitivity of general use sensitivity type (OMI) and high sensitivity type (OMI-L) in lower power consumption to meet with users' versatile applications. Furthermore, hermetically sealed high performance type (OMI-SH) is also available for severe environmental applications in addition to general Anti-flux type (OMI-S). Hermetically sealed type offers washable construction.

Contact element system employs AgCdO for 10A on 1 transfer type, and AgCdO for 5A and AgCdO-Aup for 5A on 2 transfer type.



Main Features:

1. High performance low cost P. C. Board Use Relay
2. Miniature and slim type offering small board space factor
3. High dielectric strength of 5000VAC and surge resistive voltage more than 10KV
4. Design conforms to foreign safety standards like UL, CSA, VDE, etc.
5. Anti-flux construction offers high and long reliability, and effective productivity.
6. Long service life of electrically 100,000 cycles and mechanically 5,000,000 cycles

ORDERING CODE

O M I - S - 1 1 2 L M 1

Type

S: Anti-flux
SH: Hermetic Sealed type

Contact Material
Non-Indication: AgCdO
I: Aup

Nonindication: Transfer
M: Make contacts
B: Break contacts

Coil Resistance
D: Standard
L: High Sensitive

Voltage
103, 203: 3VDC
105, 205: 5VDC
106, 206: 6VDC
109, 209: 9VDC
112, 212: 12VDC
124, 224: 24VDC
148, 248: 48VDC
(SPDT) (DPDT)

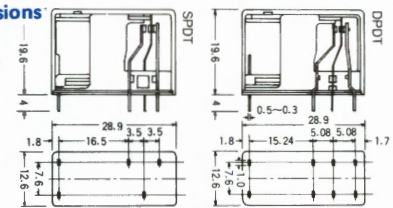
** REMARKS **

In case you require your own specs., please contact us.
We may arrange your specs., for our acceptance.

Connection Diagram



Dimensions



Printed Circuit Diagram

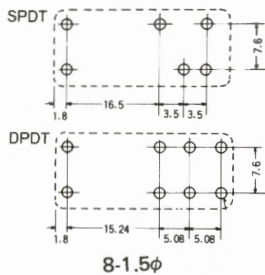
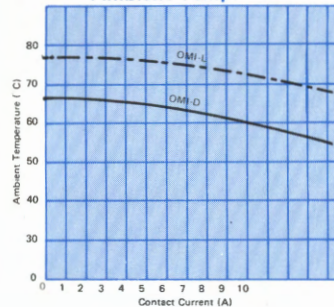


Fig. 1 Contact Current vs Ambient Temp.



(Coil energized with nominal voltage)

Fig. 2 Operating Range (SPDT, 10A)

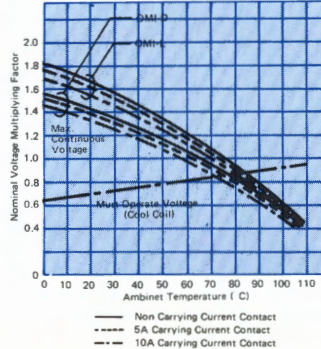
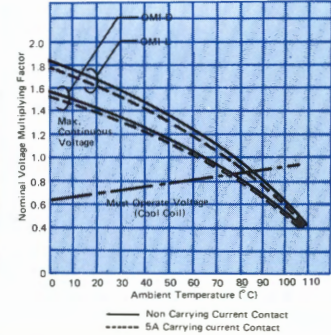


Fig. 2 Operating Range (DPDT, 5A)



Nominal Coil

Nominal Voltage (V)	Nominal Current (mA)		Coil Resistance (Ω)		Pull-In Voltage (V)	Drop-Out Voltage (V)	Max. Continuous Rated Voltage (V)
DC 3	240	176	12.5	17	less than 70% of nominal voltage	more than 10% of nominal voltage	See Fig. 2
DC 5	138	106	36	47			
DC 6	120	88	50	68			
DC 9	78	58	115	155			
DC 12	60	44	200	270			
DC 24	29	22	820	1,100			
DC 48	14.5	11	3,300	4,400			

Remark: The above values are at 20°C

Contact Capacity and Contact Materials

		SPDT	DPDT
Contact Capacity	Resistance Load	10A	5A
	Inductive Load	1/4 HP 10A	1/8 HP 5A
Contact Material		AgCdO -Aup	AgCdO

Specification

Coil power	0.72W
Consumption (at nominal voltage)	0.53W
Contact Resistance	Less than 50MΩ
Operate Time	ab. 15ms (at nominal voltage)
Release Time	ab. 7ms (at nominal voltage)
Dielectric Strength	AC 5,000V, 50/60Hz p.m.
Insulation Resistance	More than 100MΩ at DC 500V
Temperature range	-30°C to +55°C (non-condensing)
Temperature rise	Less than 50deg (at nominal voltage)

Surge Strength 10 KV

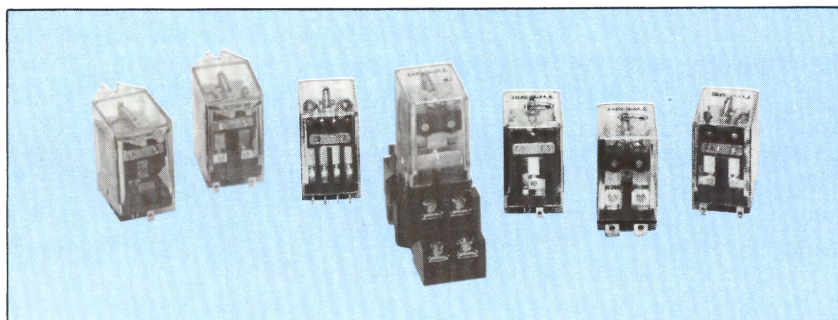
Vibration Resistance	Vibration 10-55Hz Amplitude 2 mm Incorrect Operate 10-55Hz Amplitude 1.0 mm
Shock Resistance	Incorrect Operate 10G
Mechanical Life Expectancy	More than 5,000,000 times
Electrical Life Expectancy	More than 100,000 times
Max. Operation	Electrical: 1,800 times/hour Mechanical: 18,000 times/hour
Weight	13 grs.

TYPE SRE

LOW COST. HIGHLY RELIABLE

MAIN FEATURES

- SRE and SRET cover load current from 3A upto 15A on Pole Numbers of 1, 2 and 4 in spite of very small construction.
- High reliability and long service life.
- High Sensitivity and Fast Operation even in small Power Consumption
- Strong construction for Vibration and shock.
- UL File No.E58304(S)
- SRET type conforms with UL and CSA.



RATING SPECIFICATIONS

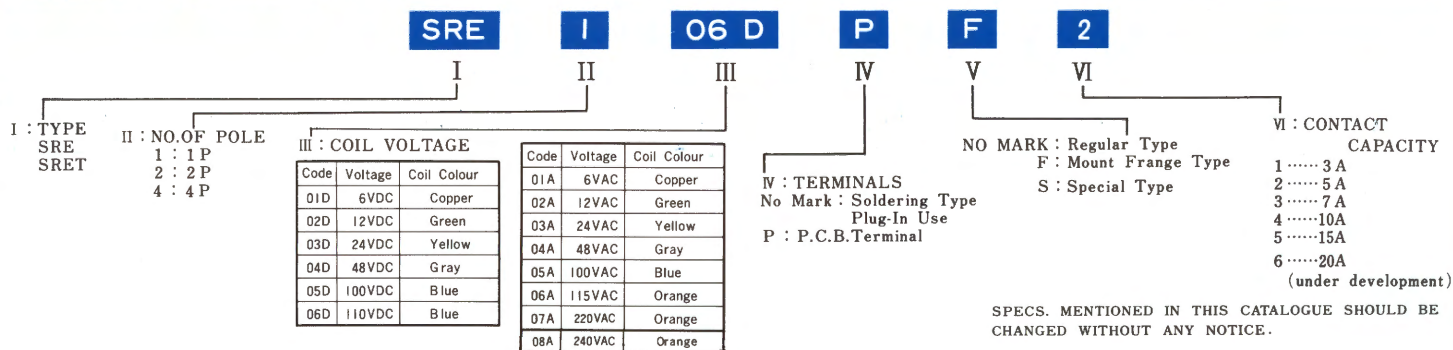
Voltage	Item	Current(mA)		Coil Resistance(ohm)	Operate Voltage(V)	Release Voltage(V)	Max. Allowable Voltage(V)
		50Hz	60Hz				
AC	6	234	200	10	80% Max.	30% Min.	110%
	12	117	100	43			
	24	58.5	50	160			
	50	28.1	24	600			
	100/115	14.1	12/13.6	2900/3900			
	200/240	9.4	8/5.5	15000			
DC	6	150		40	10% Min.		
	12	75		160			
	24	36.9		650			
	48	18.5		2600			
	100/110	9.1/10		10000/11000			

Note: Current and Coil Resistance values are measured under 20°C of Coil Temperature. Tolerance should be +15% -20% for AC Use and ±15% for DC Use and ±15% for Coil Resistance.

Item	Load	1, 2 Poles(SRE)		4 Poles(SRE)		1, 2 Poles(SRE)		1 Pole(SRET)		2 Poles(SRET)	
		R Load	L Load	R Load	L Load	R Load	L Load	R Load	L Load	R Load	L Load
Rating		AC220V/5A	2A	AC220V/3A	0.8A	AC220V/7A	3.5A	AC110V/15A	10A	AC110V/10A	7.5A
Load		DC24V/5A	2A	DC24V/3A	1.5A	DC24V/7A	3.5A	DC24V/15A	7A	DC24V/10A	5A
Current		5A		3A		7A		15A		10A	
Allowable Voltage		AC250V	DC125V	AC250V	DC125V	AC250V	DC125V	AC250V	DC125V	AC250V	DC125V
Max. Current		5A	5A	3A	3A	7A	7A	15A	15A	10A	10A
Capacity	Al	1100VA	440VA	660VA	180VA	1540VA	170VA	1700VA	1100VA	1100VA	830VA
	DC	150W	60W	90W	45W	170W	85W	360W	170W	240W	120W
Min. Load		—		DC 1V 1mA		—		—		—	
Contact Material		AgCdO		Ag		AgCdO		AgCdO		AgCdO	

Note: L Load: $\cos \phi = 1$ L Load: $\cos \phi = 0.4$ L/R=7ms If larger contact capacity will be required, please contact us.

TYPE CONSTRUCTION

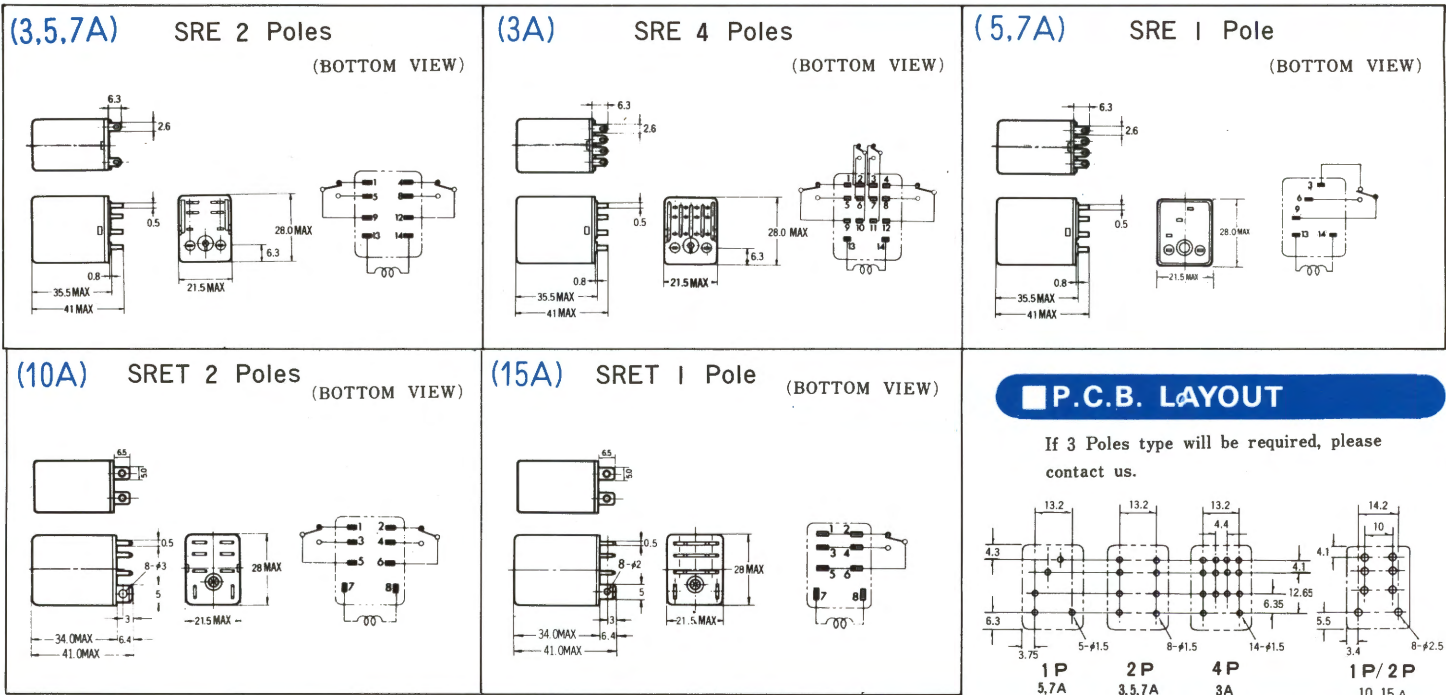


SPECIFICATIONS

- Contact Resistance : 50 milli ohm Max.
- Operate Time : 20 milli sec. Max.
- Release Time : 20 milli sec. Max.
- Max. Operations :
Mechanically 18,000 operations/hour
Electrically 1,800 operations/hour
- Insulation Resistance : 100 Meg ohm Min. at DC500V
- Dielectric Strength : AC1500V 50/60Hz for one minute
(AC1000V between non continuous contacts)
- Vibration : 10-55Hz Double Amplitude 1mm
(Operation Error 10-55Hz Double Amplitude 1mm)

- Shock : 1000m/s^2 (abt. 100G)
(Operation Error 200m/s^2 abt. 20G)
- Service Life :
Mechanically AC 50,000,000 operations
DC 100,000,000 operations
Electrically 1, 2 P 500,000 operations
4P 200,000 operations
(at Rating Load)
- Operating Tem. : $-10 \sim +55^\circ\text{C}$ (No condensing)
- Operating Humidity : 45~85% RH
- Weight : abt. 35grs.

DIMENSION



SRE, SRET LIFE CURVE

