NEC

Miniature Power Relays MR71/72 Series

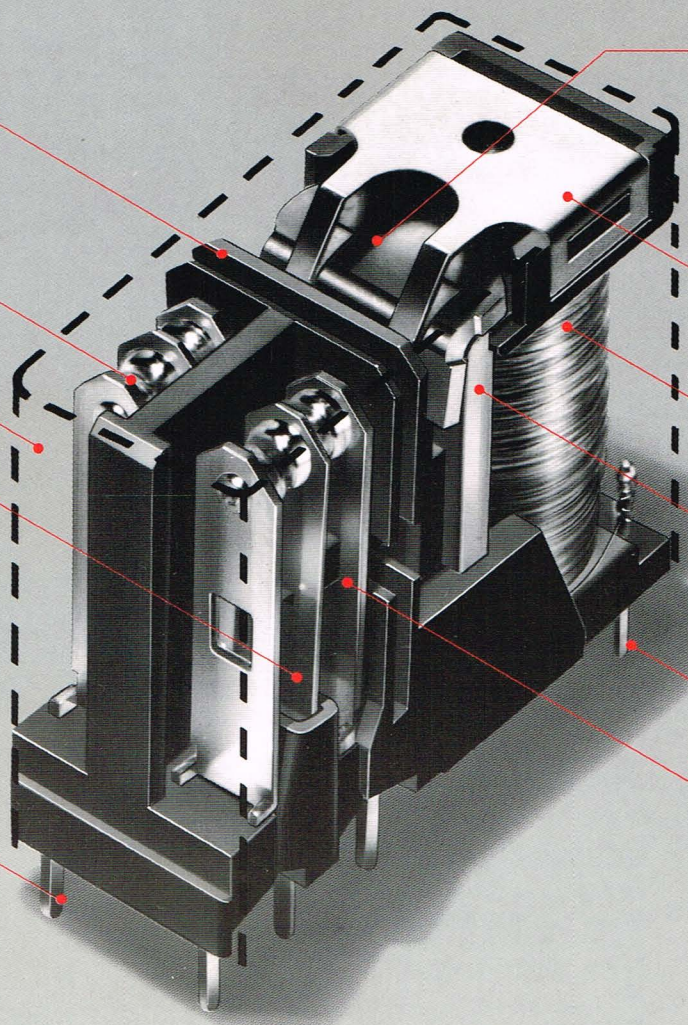
Base
Perfect separation between coil and contacts

Contacts

Cover

Movable contact spring

Terminal



Armature

Hinge Spring

Coil
High heat resistance

Yoke

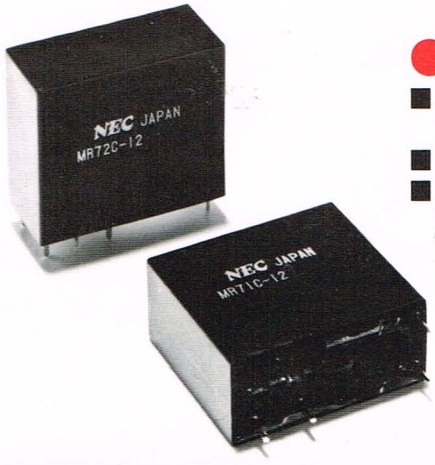
Coil Terminal

Actuating Card

Australia Telecom Approval
Approval No. RA 85/105

GENERAL

The MR70 series miniature power relay is suitable for the applications which require high power switching in a compact package. Typical applications are remote controlled TV, copiers, vending machines and air conditioners.



FEATURES

- *MR70 can withstand 10,000V surge in (1 × 40) μsec between coil and contact.*
- *111A inrush current (TV5 requirement)*
- *Small mounting space for high density packaging.*
- *UL / CSA / VDE under application.*

NUMBERING SYSTEM

MR71 A -05 ( ) ( )

- No. of Contacts: 1 or 2
- Contact form: A: Make; B: Break; C: Changeover
- Coil voltage (Vdc): 3, 5, 6, 12, 24, 48
- Enclosure: Nil: Fluxtight; S: Washable
- Approval: U: UL; V: VDE; Nil: Standard

COIL RATING

at 25°C (77°F)

Nominal Coil Voltage (VDC)	Coil Resistance (Ω ±10%)	Operate Voltage (VDC)	Releace Voltage (VDC)*	Max. Coil Voltage (VDC)
3	18	2.1	0.3	3.3
5	50	3.5	0.5	5.5
6	72	4.2	0.6	6.6
12	285	8.4	0.12	13.2
24	1,150	16.8	0.24	26.4
48	4,600	33.6	0.48	52.8

*Relay with 15% of nominal coil voltage as release voltage is available upon request.

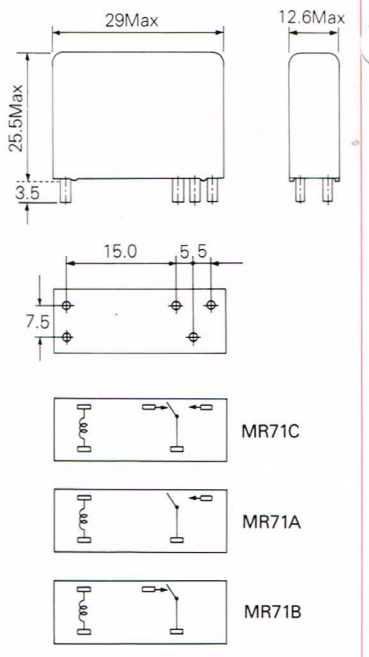
SPECIFICATIONS

ITEMS		SPECIFICATIONS	
		MR71 Series	MR72 Series
Comtact Form		1 Form A, B or C	2 Form A, B or C
Contact Rating	Nom. Switching Power	30VDC-10A, 250VAC-10A (resistive)	30VDC-5A, 250VAC-5A (resistive)
	Max. Switching Power	300W, 2,500VA	150W, 1,250VA
	Max. Switching Voltage	125VDC, 380VAC	125VDC, 380VAC
	Max. Switching Current	10A	5A
	Max. Carrying Current	14A	7A
	Min. Switching Power	5VDC, 1A	5VDC, 0.5A
Contact Resistance (initial)		100mΩ max. measured at 6Vdc, 2A	
Contact Material		Silver Oxide Complex	Silver Nickel Alloy
Operate Time		15ms max.	
Release Time		5ms max.	
Power Consumption (Approx)		0.5W (Nominal), 0.25W (Operate)	
Insulation Resistance		1,000MΩ min. at 500VDC	
Breakdown Voltage (for 1 min.)		Between Coil and Contacts 5,000VAC Between Open Contacts 1,000VAC Between Adjacent Contacts 3,500 VAC (for MR72)	
Shock Resistance		10G	
Vibration Resistance		10G	
Ambient Temperature		−40°C ~ +70°C (−40°F ~ +158°F)	
Coil Temperature Rise		30°C at nominal coil voltage (86°F)	
Life	Mechanical	10 million ops	
	Electrical at Nom. switching power	0.1 Million ops	

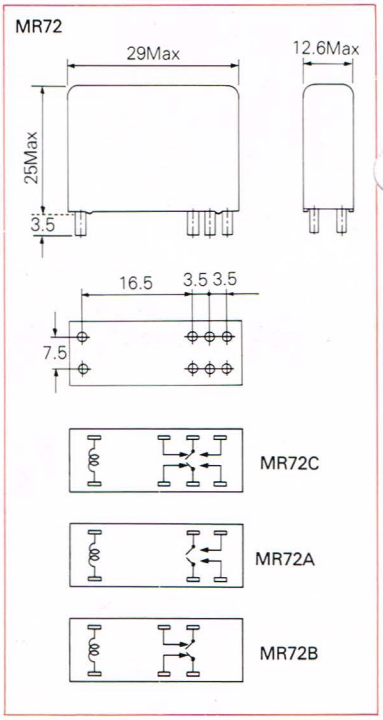
All specifications are subject to be changed without notice.

DIMENSIONS AND P/C BOARD PATTERN

MR71



MR72



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