

The DowKey Microwave 412 Series switches are designed for high performance, high power applications in microwave systems to 12.4 GHz. The RF path is optimized for Type "N" connectors. The DowKey designed connector features a mechanically captivated center conductor. This eliminates epoxy staking, and consequently, RF leakage. The switch is available with or without a mounting bracket.



Typical applications for the 412 Series include:

- Switch Matrixes
- Standby Transmitters with Dummy Load
- Alternate Antenna Select

DowKey® 412 Series Latching

Specifications:

Operating Voltage:

(across temperature range)

12 Vdc (11-14 Vdc)

28 Vdc (24-32 Vdc)

Coil Current (Nominal):

12 Vdc 300 mA

28 Vdc 175 mA

Switching Time:

20 mS maximum

Operating Temperature:

-25°C to +65°C

Mechanical Life, Cycles:

1 x 10⁶ minimum

Vibration, Operating:

10 G RMS, 20-2000 Hz

Mechanical Shock, Non-Operating:

30 G, 1/2 Sine, 11 mS

Nominal Weight:

14 oz., (397g.)

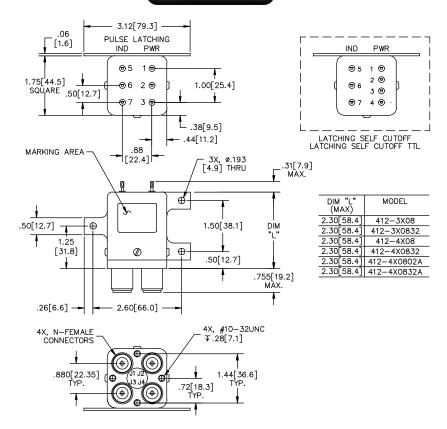
RF Characteristics

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)	RF Power Watts (CW)
0-1	1.15	85	0.15	1000
1-2	1.20	80	0.20	350
2-4	1.25	70	0.25	250
4-8	1.35	65	0.35	150
8-12.4	1.50	60	0.50	120

Connectors and Part Numbers

Nominal Coil Voltage	Connector Type	Standard	with Mechanical Indicators
Pulse Latch			
12 Vdc	N	412-3201	412-320132
28 Vdc	N	412-3301	412-330132
Latching with	Self Cut-Off		
12 Vdc	N	412-4201	412-420132
28 Vdc	N	412-4301	412-430132
Latching with	Self Cut-Off, TTL Co	ompatible	
12 Vdc	N	412-420102A	412-420132A
28 Vdc	N	412-430102A	412-430132A

Mechanical



Available Options

Immersion Seal

Operating Voltages: 15, 20, 24 Vdc

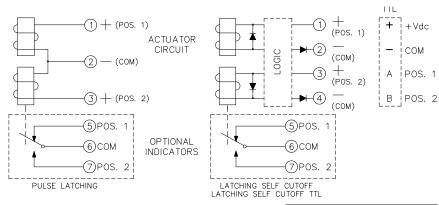
Jan TX TTL Drive Components

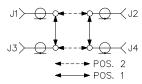
-55°C to +85°C Operation

BNC, TNC Connectors (Consult factory for RF characteristics)

DowKey Bracket

Electrical





LOGIC TRUTH TABLE						
RF PATH	INDICATOR PATH	LOGIC INPUT "A"	LOGIC INPUT "B"			
J1-J3/J2-J4	COM-1	1	0			
J1-J2/J3-J4	COM-2	0	1			
N=N = = = : :						

[&]quot;0" = 0.0V - 0.8V"1" = 2.4V - 5.5V