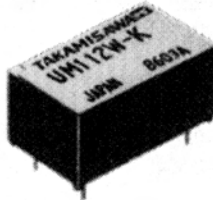


Signal Printed Circuit Board Relays

UM RELAY

0.1 Amp SPDT W — 0.449",
L — 0.787", H — 0.394"



CONTACT DATA

Arrangement — 1 form C (SPDT bifurcated)
Ratings — 24V DC 10 mA, 1W at 900 MHz
Resistance — 100 mΩ max. (initial value)
Max. Current — 100 mA DC
Max. Voltage — 30V DC
Max. Power — 1W DC, 10W at 900 MHz
Life Expectancy — Mechanical: 1,000,000 operations min.
Electrical: 300,000 operating min. at rated load

COIL DATA

Voltage — 1.5 to 48V DC
Power — (at 20°C)

Type	Operate	Nominal
Single Winding Non Latching	0.1W (0.11W for 48V coil)	0.2W (0.22W for 48V coil)
Single Winding Latching	0.1W	0.2W
Double Winding Latching	0.2W	0.4W

Operate wattage less than 70% of nominal voltage

GENERAL DATA

Insulation Resistance — 1000 MΩ min. at 500V DC (UMIL-D, except between P.S. Coil)
Dielectric Strength — 500V AC between open contacts, between contacts and earth
1000V AC between coil and other terminals
Temperature Range — -30°C ~ +80°C at nominal voltage
Time Value — 6 msec max. at nominal voltage (UMI Release Time 5 ms)
Vibration Resistance — 30G (10 ~ 55 Hz) Destructive
20G (10 ~ 55 Hz) Unerring } reference value
Shock Resistance — 100G (6 msec) Destructive
50G (11 msec) Unerring

HIGH FREQUENCY CHARACTERISTICS

Isolation — 60 dB min. at 900 MHz
Insertion Loss — 1 dB max. at 900 MHz
V.S.W.R. — 1.2 max. at 900 MHz
(Impedance of the measuring devices is 75Ω)

Ordering Code	Nominal Coil Voltage (VDC)	Coil Resistance ±10% at 20°C(Ω)	Must Operate Voltage at 20°C (VDC)	Release or Reverse Operate Voltage at 20°C (VDC)
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Standard

UM1—3W-K	3	45	+2.1	+0.3
UM1—5W-K	5	125	+2.1	+0.3
UM1—6W-K	6	180	+4.2	+0.6
UM1—9W-K	9	405	+6.3	+0.9
UM1—12W-K	12	720	+8.4	+1.2
UM1—18W-K	18	1620	+12.6	+1.8
UM1—24W-K	24	2880	+16.8	+2.4
UM1—48W-K	48	10472	+33.6	+4.8

Single Winding Latching

UM1L—3W-K	3	45	+2.1	-2.1
UM1L—5W-K	5	125	+3.5	-3.5
UM1L—6W-K	6	180	+4.2	-4.2
UM1L—9W-K	9	405	+6.3	-6.3
UM1L—12W-K	12	720	+8.4	-8.4
UM1L—18W-K	18	1620	+12.6	-12.6
UM1L—24W-K	24	2880	+16.8	-16.8
UM1L—48W-K	48	11520	+33.6	-33.6

Double Winding Latching

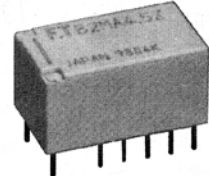
UM1L—D 3W-K	3	22.5	+2.1	-2.1
UM1L—D 5W-K	5	62.5	+3.5	-3.5
UM1L—D 6W-K	6	90	+4.2	-4.2
UM1L—D 9W-K	9	202.5	+6.3	-6.3
UM1L—D 12W-K	12	360	+8.4	-8.4
UM1L—D 18W-K	18	910	+12.6	-12.6
UM1L—D 24W-K	24	1440	+16.8	-16.8
UM1L—D 48W-K	48	5760	+33.6	-33.6

Notes

- As to the positive (+) symbol of each value, such as working voltage, positive working voltage, open voltage and reverse working voltage, positive (+) electrode of power source should be connected to the positive (+) terminal of pin arrangements.
- Reverse working voltage for wirewound latch type.
As to the negative (-) symbol, positive (+) electrode of power source should be connected to negative (-) terminal of pin arrangements.

FTR-B2 RELAY

1 Amp
L - 10.0 mm
W - 17.0 mm
H - 9.4 mm



CONTACT DATA

Arrangement - 2 form C and 2 form A (N.O.)
Material -Standard: gold-overlay silver-alloy
Type - Bifurcated
Resistance (initial)- Maximum 75mΩ
Ratings (resistive) - 1 A 30 VAC Or 0.2 A 125VDC
Max. Carrying Current: 1.25 A
Max. Switching Power: 25 VA or 30W
Max. Switching Voltage: 1100 VAC or 125 VDC
Max. Switching Current: 1 A

Life Expectancy - Mechanical: 10 x 10⁶ ops. min.
Electrical: 50x10³ ops. min. (at 30VDC 1A)
100 x 10³ ops. min. (at 125VDC 0.2A)

COIL DATA

Voltage (at 20°C) - 4.5 to 12 VDC
Power (at 20°C) - 0.4W
Operate Power (at 20°C) - 0.23W

GENERAL DATA

Insulation Resistance - 1000 MΩ
Dielectric Strength - 750 VAC 1min. (between open contacts)
1,500 VAC 1min. (coil and contacts)
Surge Strength - 2,500 V
Temperature Range - -40°C to +85°C
Time Value - Operate: 10 msec. / Release: 5 msec. (at nominal voltage)
Weight - Approx. 3.9 g
Enclosure - LCP

Standard

Nominal Voltage	Coil Resistance (±10%)	Must Operate Voltage (VDC at 20° C)	Must Release Voltage (VDC at 20° C)	Nominal Power (W at 20° C)	Ordering Code
4.5	50	3.38	0.45	0.4	FTR-B2MA4.5Z
12	355	9.0	1.2	0.4	FTR-B2MA012Z

Surface mount

4.5	50	3.38	0.45	0.4	FTR-B2NA4.5Z
12	355	9.0	1.2	0.4	FTR-B2NA012Z

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