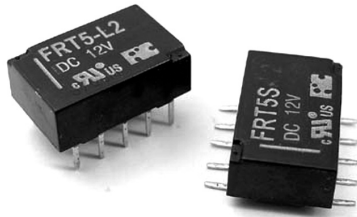


**FRT5**



**Compact Size Telecom Latching Relay**

- Compact size and low profile
- Conforms to FCC Part 68 1500V Surge Dielectric
- DIL Pitch Terminals
- Surface mount type with “L” shaped terminals
- Fully sealed (Immersion Cleanable)
- Single or double coil latching type is available
- High sensitivity

Recognized File No.: E 141516

**Technical data**

**Characteristics**

- Contact Arrangement: 2 Form C
- Contact Material: Movable Contact: Silver Alloy  
Stationary Contact: Gold Clad Silver Alloy
- Contact Resistance (Initial): 50mΩ Max. (Measured at 1A 6V DC)
- Contact Rating (Resistive Load): 1A 30VDC/0.5A 125VAC
- Switching Voltage: DC 220V Max. AC 250V Max.
- Switching Current: 1A Max.
- Switching Power: 30W DC/62.5VA AC
- Switching Load (Min.): 0.01mA 10m VDC (Reference Value)
- Electrostatic Capacitance:
  - 0.4pF Approx. (between open contact)
  - 0.9pF Approx. (between coil and contact)
  - 0.2pF Approx. (between contact poles)
- Operate Time (at Nominal Voltage): 2ms Approx.
- Release Time (at Nominal Voltage): 1ms Approx.
- Set Time (latching at Nominal Voltage): 2ms Approx.
- Reset Time (latching): 2ms Approx.
- Insulation Resistance: 1000mΩ Min. (500V DC)
- Dielectric Strength:
  - 1000Vrms/1 minute between open contact
  - 1000Vrms/1 minute between coil and contact
  - 1000Vrms/1 minute between contact sets
- Surge Voltage (FCC):
  - 1500V between open contact
  - 1500V between coil and contact
  - 2500V between contact sets
- Shock Resistance:
  - Functional: 50G (11ms)
  - Destructive: 100G (6ms)
- Vibration resistance:
  - Functional: 3mm D.A. 10-55Hz
  - Destructive: 5mm D.A. 10-55Hz
- Temperature Range:
  - FRT5: -40 °C to +70 °C
  - FRT5S: -40 °C to +85°C
- Operation Life (Assistive Load):
  - Mechanical: 10<sup>8</sup> ;
  - Electrical: 2 x 10<sup>5</sup> at 1A 30VDC, 1 x 10<sup>5</sup> at 0.5A 125VAC
- Weight: 1.5g Approx.

**Coil rating**

**FRT5/FRT5S - Single Side Stable**

Rated Voltage (V DC)	Coil Resistance $\Omega$ +/- 10%	Rated Current (mA)	Must operate voltage (VDC) Max.	Must release voltage (VDC) Min.	Maximum voltage (VDC) Max.	Power consumption (W)
3	64,3	47	2.25	0.3	7.5	0.14 Approx.
4.5	144	31	3.375	0.45	11.25	
5	178	28	3.75	0.5	12.5	
6	257	23.5	4.5	0.6	15.0	
9	579	15.5	6.75	0.9	22.5	
12	1028	11.7	9.0	1.2	30.0	
24	2880	8.3	18.0	2.4	48.0	0.2 Approx.

**FRT5-L1 - 1 Coil Latching**

Rated Voltage (V DC)	Coil Resistance $\Omega$ +/- 10%	Set Voltage (VDC) Max.	Reset Voltage (VDC) Max.	Maximum Voltage (VDC)	Power consumption (W)
3	90	2.25	2.25	8.7	0.10 Approx.
4.5	202	3.375	3.375	13.05	
5	250	3.75	3.75	14.5	
6	360	4.5	4.5	17.4	
9	810	6.75	6.75	26.1	
12	1440	9.0	9.0	34.8	
24	3840	18.0	18.0	57.6	0.15 Approx.

**Ordering information**

**FRT5 - L1 DC 12V**

Rated voltage

NIL: Single side stable

L1: 1 coil latching

L2: 2 coil latching (only for FRT5 series)

Relay model:

FRT5: Standard PC mount

FRT5S: Surface mount (SMD type)

**DIMENSIONS (mm)**

