

Issue :5 **FTR-K2G Relay (Contact Gap 3mm)**

Power Relay

**[FEATURES]**

- Contact gap >3mm
- 1 pole 20A, 1 form A
- High insulation in small package (between coil and contacts)
  - Insulation distance : clearance >8.0mm / creepage >9.5mm
  - Dielectric strength : AC5,000V
  - Surge strength : 10,000V
- Plastic materials
  - Flammability : UL94 V-0
- Contains no lead and features cadmium-free contacts for eco-program
- Conforms to the various safety standards – C-UL, VDE approved
  - UL508, CSA C22.2 No.14
  - VDE0435, 0631, 0700, 0860
  - Conform to TV-8 rating

RoHS compliant



**1. ORDERING INFORMATION**

[Example] FTR-K2G A K 012 T  
 (a) (b) (c) (d) (e)

(a)	Series Name	FTR-K2G
(b)	Contact Arrangement	A : 1 form A
(c)	Coil Sensitive	K : Standard Sensitive
(d)	Coil Number	Coil Nominal Voltage (ex.012→12VDC)
(e)	TV rating	T : TV-8 rating

**2. COIL DATA CHART**

Coil Number	Nominal Voltage [VDC]	Coil Resistance [ohms] (tolerance of 10%)	Operate Voltage [VDC]	Release Voltage [VDC]	Nominal Power [W]
005	5	25	3.25	0.25	Approx 1.0
006	6	36	3.9	0.3	
009	9	81	5.85	0.45	
012	12	145	7.8	0.6	
018	18	325	11.7	0.9	
022	22	485	14.3	1.1	
024	24	580	15.6	1.2	
048	48	2,200	31.2	2.4	
060	60	3,600	39.0	3.0	
110	110	13,000	71.5	5.5	

All values in the table are measured at 20 degree C.

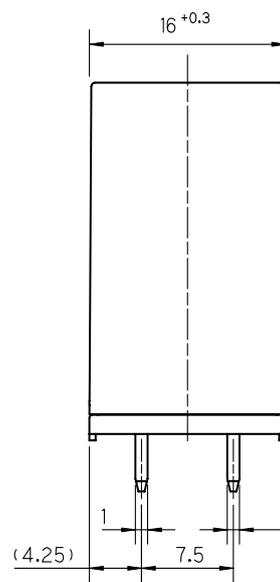
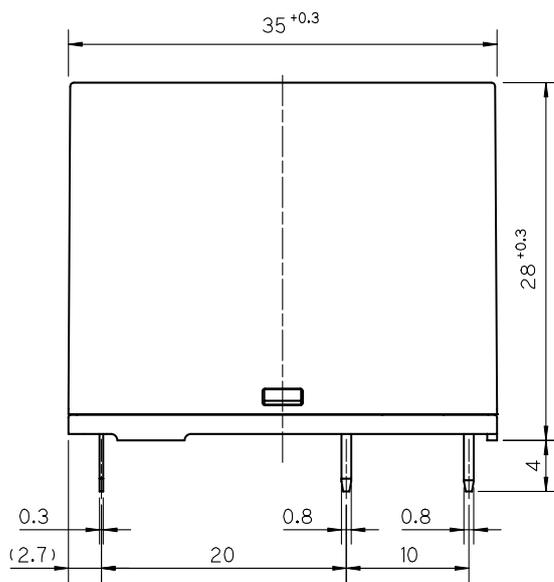
**3. SPECIFICATIONS**

Item		FTR-K2G Relay	
Contact	Arrangement	1 form A	
	Material	Silver alloy	
	Resistance (Initial)	Max. 100 mΩ (at 1A 6VDC)	
	Rating	20A 250VAC	
	Max. Carrying Current	25A	
	Max. Switching Power	5,000VA	
	Max. Switching Voltage	440VAC	
	Min. Switching Load	100mA 5VDC (Reference)	
	Max. Inrush Current	117A 120VAC (at lamp load)	
Coil	Operating Temperature	-40 to +70 deg (no frost)	
Time Value	Operate (without diode)	Max. 30ms (at nominal voltage, without bounce)	
	Release (without diode)	Max. 15ms (at nominal voltage, without bounce)	
Insulation	Resistance (at 500VDC)	Min. 1000MΩ	
	Dielectric Strength	B/T contacts	2,000VAC, 1 minute
		B/T coil and contacts	5,000VAC, 1 minute
	Surge Strength	10,000V / 1.2x50μs	
Life	Mechanical	1 x 10 <sup>6</sup> ope. min.	
	Electrical	Resistive	1 x 10 <sup>5</sup> ope. min.
		Ramp (TV-8)	25x10 <sup>3</sup> ope. min.
Vibration Resistance	Miss operation	10 to 55 Hz at double amplitude of 1.5mm	
	Endurance	10 to 55 Hz at double amplitude of 1.5mm	
Shock Resistance	Miss operation	Min. 100m/s <sup>2</sup> (11±1ms)	
	Endurance	Min. 1,000m/s <sup>2</sup> (6±1ms)	
Weight		Approx. 33g	

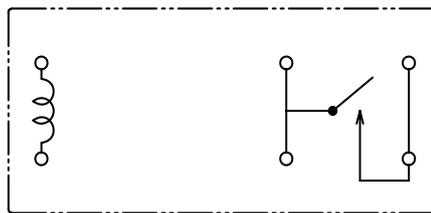
**4. SAFETY STANDARD**

C-UL	VDE
20A 277VAC 100,000 operations TV-8 120VAC 25,000 operations	20A 250VAC cos Φ=1 T70 100,000 operations 8/120A 250VAC T70 30,000 operations

5. Dimensions



6. Schematics (Bottom View)



7. PC board mounting hole layout (Bottom View)

