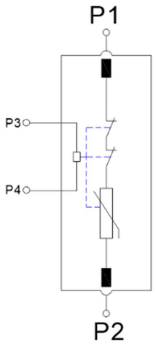
1. Description

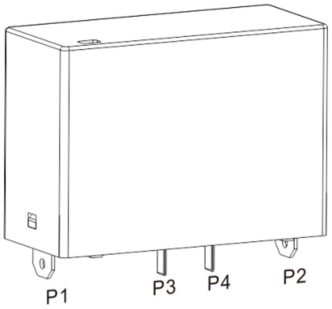
Power Surge Protective Device Installed on pcb is a combination of varistor and thermally protected mechanical disconnect. The varistor has aging characteristics. When the varistor (MOV) deteriorates or fails, the device with thermal tripping mechanism can separate the varistor from the main circuit through the action of the thermal protection component to prevent the varistor from catching fire. Commonly used in photovoltaic inverters, solar energy, communication equipment, computer room power supplies and other places that require high reliability and weather resistance.

2. Features

- Overvoltage Protection has High Breaking Capacity and Fast Trip Response
- It Can Meet the Working Temperature of -40 ~85 °C
- Thermal Protection, High Reliability
- Small Size
- Remote Signal Contact for Failure Indication
- High Energy Capacity
- Sealing Material, Flame-retardant to V0 (UL 94)
- Comply with UL 1449 / IEC 61643-11

3. Circuit Diagram





4. Applications

- Telecom Equipment
- String Inverter in Photovoltaic System
- AC / DC Power Supply
- Uninterruptable Power Supply (UPS)
- Surge Protective Device (SPD)
- Electric Meter
- Power Distribution Unit (PDU)
- Lightning Protection Socket

5. Part Number Code

FODE	KOV	10	M	XXX	y
Foreign trade	Product Category	Nominal Discharge Current 10: 10 kA	Design Sequence	Maximum Continuous Operating Voltage(Uc)	Maximum Continuous Operating Voltage For Pv Application (Ucpv)

6. Absolute Maximum Ratings (@TA=25℃ unless otherwise noted)

Parameter	Symbol	Typ	Value	Unit
Operating Temperature	T_{OPR}	25	-40 -85	℃
Storage Temperature	T_{STG}	25	-40 -85	℃

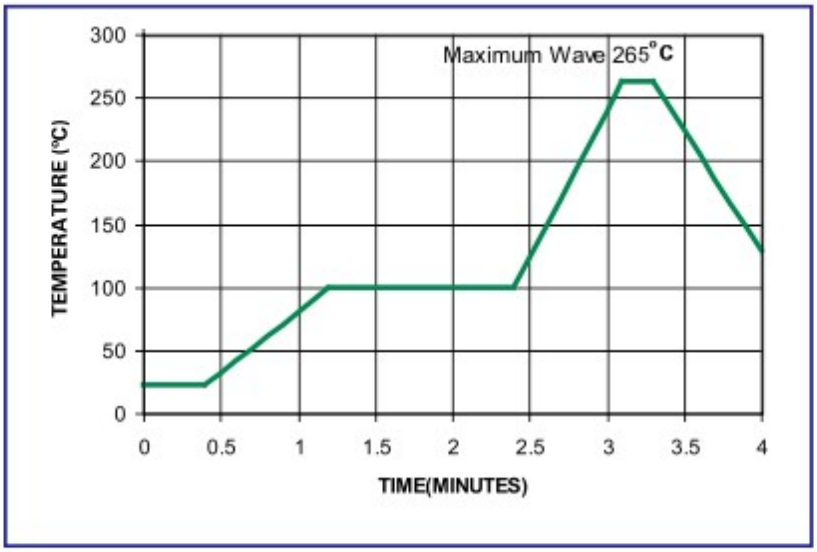
7. Electrical Characteristics(@TA=25℃ unless otherwise noted)

Type Number	Maximum Continuous Operating Voltage (uc)		Current Impulse (8/20μs)		Voltage Protection Rating (Up)	Agency		Reference Standards	
	U_C (Vac)	U_{CPV} (Vdc)	In (kA)	Imax (kA)	U_p(kV)	TUV	CE	IEC/EN 61643-11	IEC/EN 61643-31
FODEKOV10M48	-	85	10	20	0.8	●	●		●
FODEKOV10M130	130	-	10	20	0.8	●	●	●	
FODEKOV10M150	150	-	10	20	0.8	●	●	●	
FODEKOV10M175	175	-	10	20	0.8	●	●	●	
FODEKOV10M230	230	-	10	20	1.0	●	●	●	
FODEKOV10M250	250	-	10	20	1.0	●	●	●	
FODEKOV10M275	275	-	10	20	1.2	●	●	●	
FODEKOV10M300	300	-	10	20	1.3	●	●	●	
FODEKOV10M320	320	-	10	20	1.3	●	●	●	
FODEKOV10M350	350	-	10	20	1.5	●	●	●	
FODEKOV10M385	385	-	10	20	1.5	●	●	●	
FODEKOV10M500PV	-	500	10	20	1.5	●	●		●
FODEKOV10M420	420	-	10	20	1.8	●	●	●	
FODEKOV10M560PV	-	560	10	20	1.8	●	●		●
FODEKOV10M460	460	-	10	20	1.8	●	●	●	
FODEKOV10M600PV	-	600	10	20	1.8	●	●		●
FODEKOV10M510	510	-	10	20	2.0	●	●	●	
FODEKOV10M670PV	-	670	10	20	2.0	●	●		●
FODEKOV10M550	550	-	10	20	2.5	●	●	●	
FODEKOV10M720PV	-	720	10	20	2.5	●	●		●
FODEKOV10M625	625	-	10	20	3.0	●	●	●	
FODEKOV10M800PV	-	800	10	20	3.0	●	●		●
FODEKOV10M680	680	-	10	20	3.0	●	●	●	
FODEKOV10M890PV	-	890	10	20	3.0	●	●		●

8. Agency Approvals

Icom	Compliance with	The File No.	Category
ROSH	2011/65/EU		
HF	IEC61249-2-21:2003		
Pb	Mean lead free		
CE	IEC/EN 61643-11	UK230307199	Type 2
	IEC/EN 61643-31	UK230307200	
	IEC/EN 61643-11	R 50592795 0001	Type 2
	IEC/EN 61643-31	R 50592796 0001	

9. Wave Soldering Parameters (For Reference Only)

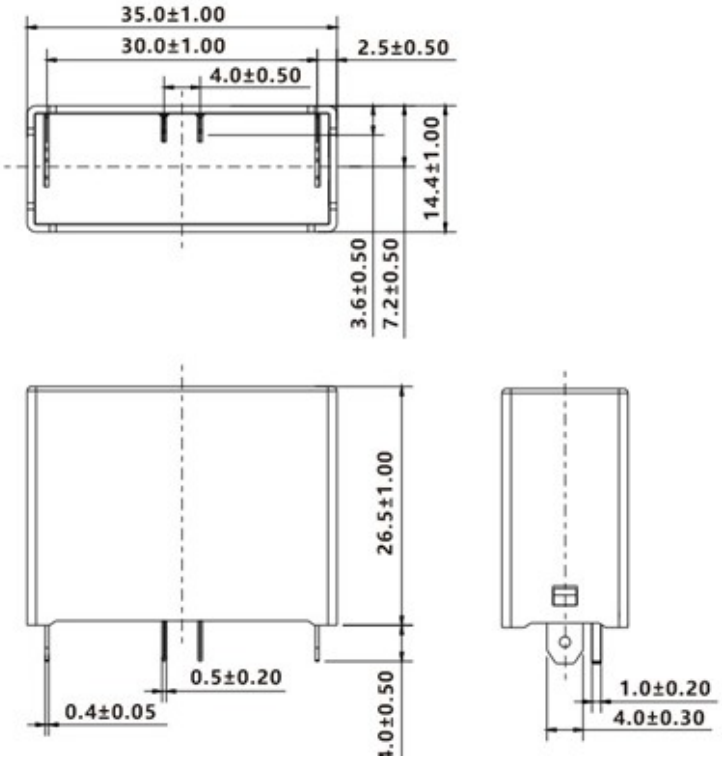


Items	Temp. (°C)	Time (s)
Preheating	80 to 100	60 to150
Dwelling	250 to 265	2 to 4

10. Recommended Hand-Soldering Parameters

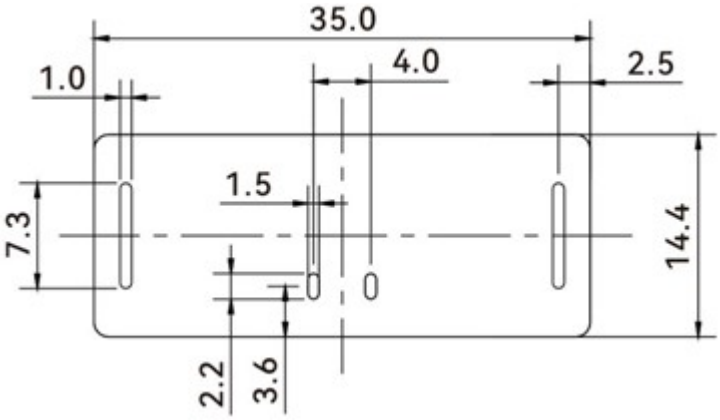
Items	Condition
Lron Temperature	350℃(Max.)
Soldering Time	4 Seconds (Max.)
Distance Between Soldering Point And The Battom Of Product	2mm(Min.)

11. Dimensions



11.1 Recommended pad cut-out size

Unit: mm



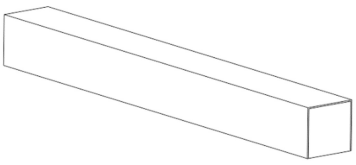
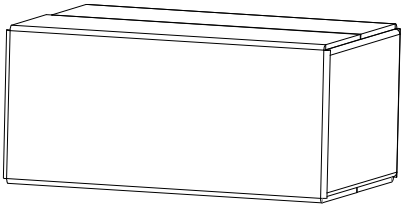
12. Marking on Product

Top marking

Front Marking

13. Packaging

BULK:

Packaging tube	Outer box size	Quantity
Size: 34.3*37.1*320(mm) 	Size: 355*355*166(mm) 	• 480 pcs. per carton • 20 pcs. Per tube • 24 inner tube per carton