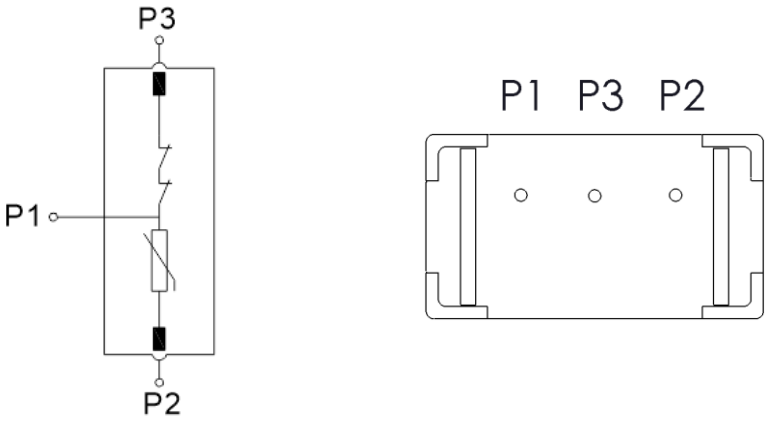
1. Description

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 ℃
- 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

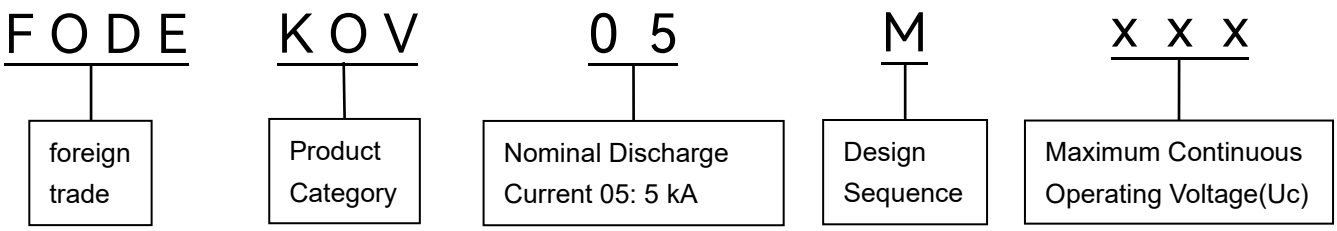
3. Circuit Diagram



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



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	℃

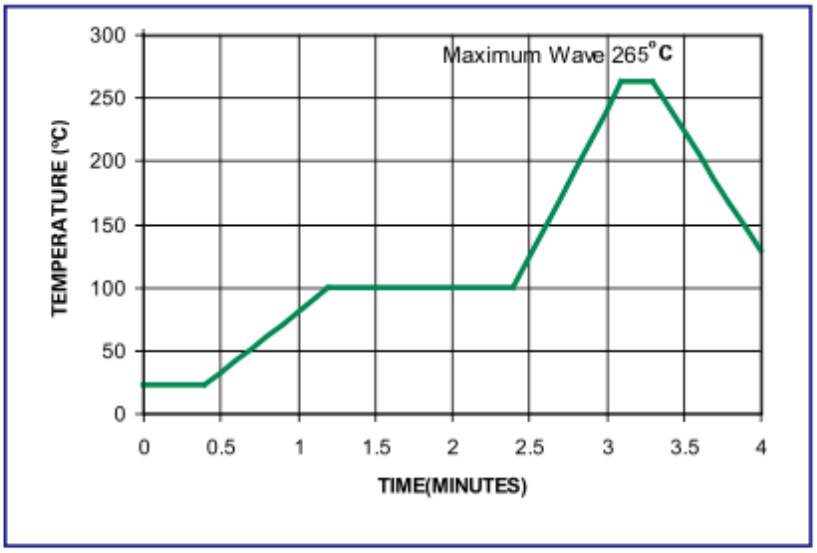
7. Electrical Characteristics(@TA=25℃ unless otherwise noted)

Type Number	Maximum Continuous OperatingVoltage(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	ICE/EN 61643-11	IEC/EN 61643-31
FODEKOV05M130	130	170	5	10	0.8	●		
FODEKOV05M150	150	200	5	10	0.8	●		
FODEKOV05M175	175	225	5	10	1.0	●		
FODEKOV05M230	230	300	5	10	1.0	●		
FODEKOV05M250	250	320	5	10	1.1	●		
FODEKOV05M275	275	350	5	10	1.2	●		
FODEKOV05M300	300	385	5	10	1.3	●		
FODEKOV05M320	320	410	5	10	1.3	●		
FODEKOV05M350	350	450	5	10	1.5	●		
FODEKOV05M385	385	505	5	10	1.5	●		
FODEKOV05M420	420	560	5	10	1.8	●		
FODEKOV05M460	460	615	5	10	2.0	●		
FODEKOV05M510	510	670	5	5	2.2	●		
FODEKOV05M550	550	745	5	10	2.5	●		

8. Agency Approvals

Icom	Compliance with	The File No.
ROSH	2011/65/EU	
HF	IEC61249-2-21:2003	
	Mean lead free	
	EN IEC 61051-1:2018，IEC 61051-2-2:1991 IEC 61051-2:2021	R 50592799

9. Wave Soldering Parameters (For Reference Only)

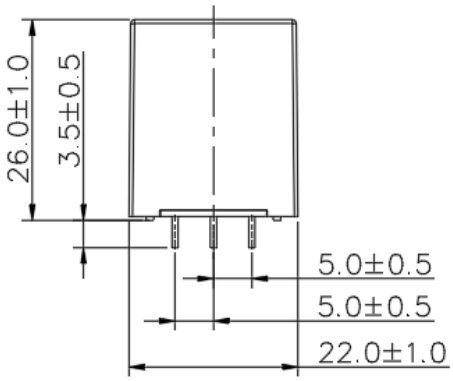


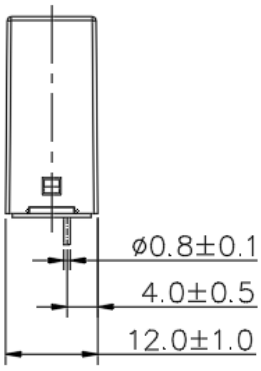
Items	Temp. (°C)	Time (s)
Preheating	80 to 100	60 to150
Dwelling	250 to 265	2 to 4

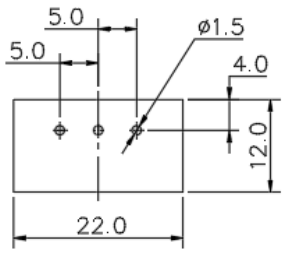
10. Recommended Hand-Soldering Parameters

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

11. Dimensions

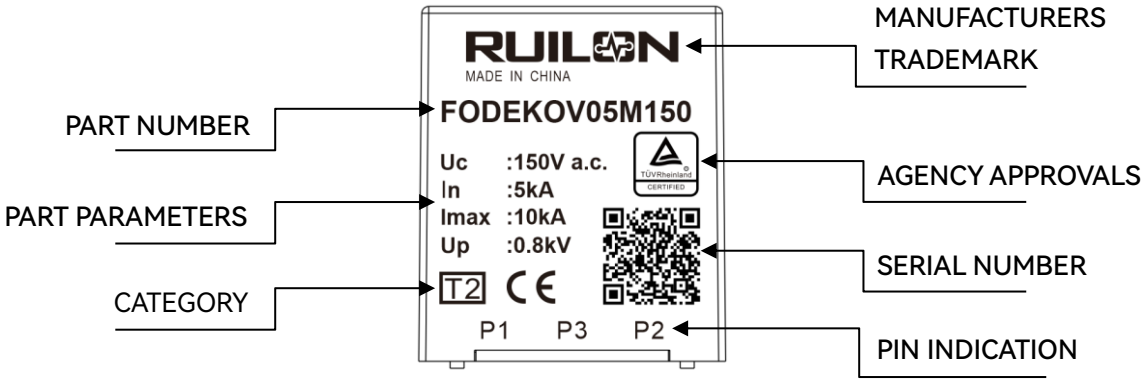






Recommended pad cut-out size
Unit: mm

12. Marking on Product

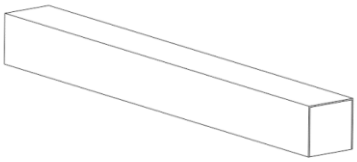
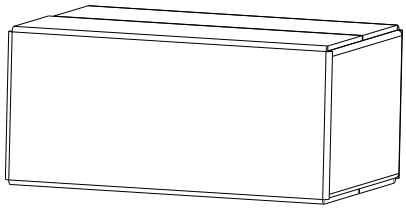


13. Main Material List

NO.	Part name	Materials
1	Enclosure	Plastic
2	Pin	CP
3	Tripping pin	Copper alloy
4	Varistor	Zinc oxide

14. Packaging

BULK:

Packaging tube	Outer box size	Quantity
Size: 300*24.4*33.9(mm) 	Size: 355*355*166(mm) 	• 720 pcs. per carton • 20 pcs. Per tube • 36 inner tube per carton