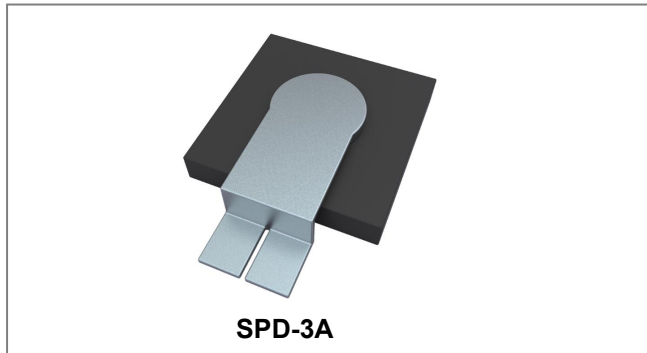


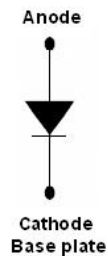
## TPK07KP48-I TVS Rectifier



### Features

- Low profile surface mount
- Unidirectional
- Fast response
- Suppresses transients up to 7000W @ 10/1000µs
- Marking : body marked with TPK07KP48
- This is a Pb - Free Device
- Open top for heat dissipation and different connection options
- All SMC parts are traceable to the wafer lot
- All part are 100% tested: electrical, 1x surge test, visual inspection
- Additional testing can be offered upon request

### Schematic & Pin Configuration



### Applications

- Protection from switching transients and induced RF

### Maximum Ratings@T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +175	°C
Thermal Resistance Junction to Case	R <sub>θJC</sub>	0.9	°C/W
Peak Pulse Power (with 10/1000µs waveform)	P <sub>PPM</sub>	7000	W
Maximum Forward Voltage @ 1000A	V <sub>F</sub>	2	V
Forward Surge Current (8.3 ms single half sine-wave)	I <sub>FSM</sub>	700	A
Power dissipation on infinite heatsink	P <sub>D</sub>	8.0	W

**Electrical Characteristics @  $T_A=25^\circ\text{C}$  unless otherwise specified**

Part Number	Nom. Stand-off Voltage $V_{wm}$ (V)	Breakdown Voltage $V_{BR}@ I_T$ (V)		Test Current $I_T$ (mA)	Max. Clamping Voltage $V_c(10/1000\mu\text{s})$ @ $I_{PP}$ (V)	Max. Reverse Leakage Current $I_R$ @ $V_{wm}$ ( $\mu\text{A}$ )	Peak Pulse Current $I_{PP}$ @ 10/1000 $\mu\text{s}$ Waveform (A)
		Min.	Max.				
TPK07KP48-I	48	58	65.1	5	85.5	10	81.9

**Ratings and Characteristics Curves**

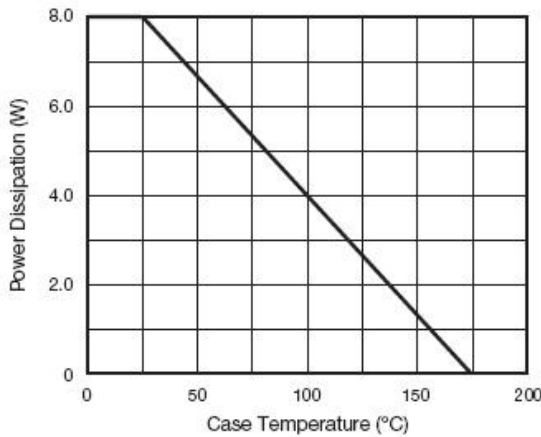


Fig. 1 - Power Derating Curve

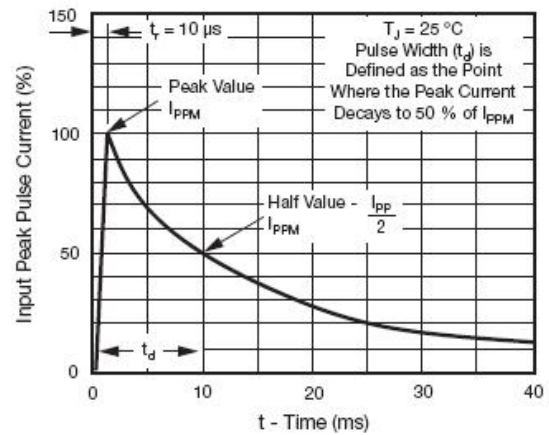


Fig. 3 - Pulse Waveform

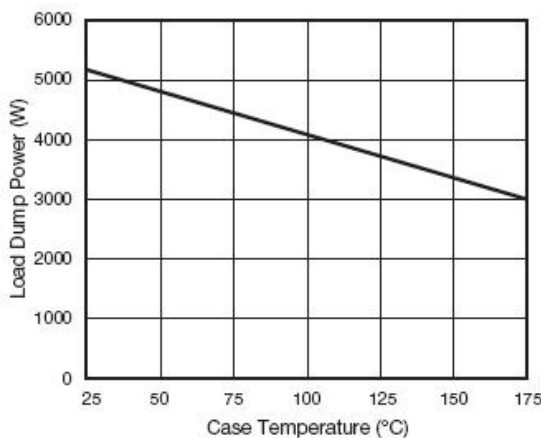


Fig. 2 - Load Dump Power Characteristics (10 ms Exponential Waveform)

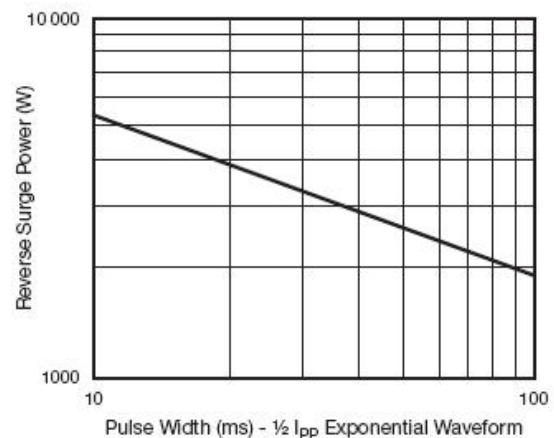
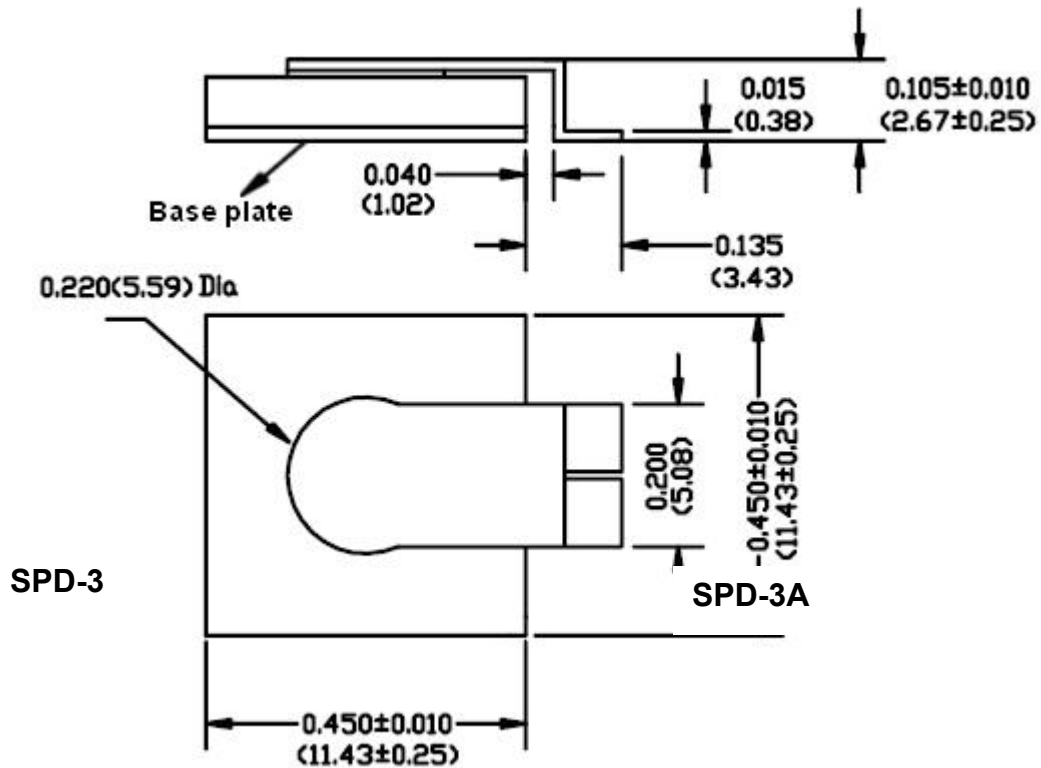


Fig. 4 - Reverse Power Capability

**Mechanical Dimensions (Inches/Millimeters)**



**Ordering Information**

Device	Package	Shipping
TPK07KP48-I	SPD-3A(Pb-Free)	100pcs/ box

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

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