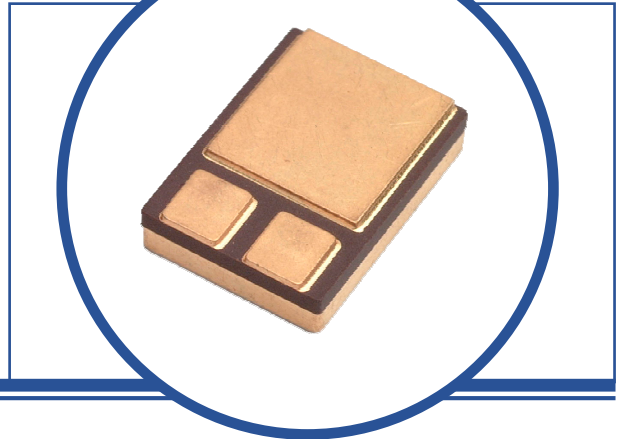


BI-DIRECTIONAL TRANSIENT VOLTAGE SUPPRESSOR

SMLTVS15KXXCASMD

- 15,000W Peak Pulse Power Rating @ 10/1000µs.
- Hermetic Ceramic Surface Mount Package SMD1 (TO-276AB)
- Glass Passivated Junction
- Excellent Clamping Capability
- Fast Response Time (typically < 1ns)
- Space Level and High-Reliability Screening Options Available



ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise stated)

Parameter	Description	Value	
		(V)	(A)
P _{pp}	Peak Pulse Power @ 10/1000µs Exponential Pulse	15,000W	
T _J	Junction Temperature Range	-65 to +175°C	
T _{stg}	Storage Temperature Range	-65 to +175°C	
TVS15K12CA	Maximum Clamping Voltage V _{CL} @ I _{pp}	19.9	753
TVS15K18CA	Maximum Clamping Voltage V _{CL} @ I _{pp}	29.2	516
TVS15K24CA	Maximum Clamping Voltage V _{CL} @ I _{pp}	38.9	384
TVS15K30CA	Maximum Clamping Voltage V _{CL} @ I _{pp}	48.4	309
TVS15K33CA	Maximum Clamping Voltage V _{CL} @ I _{pp}	54.8	274
TVS15K40CA	Maximum Clamping Voltage V _{CL} @ I _{pp}	64.5	234
TVS15K64CA	Maximum Clamping Voltage V _{CL} @ I _{pp}	103	147

Semelab plc reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing an order.

BI-DIRECTIONAL TRANSIENT VOLTAGE SUPPRESSOR SMLTVS15KXXCASMD

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise stated)

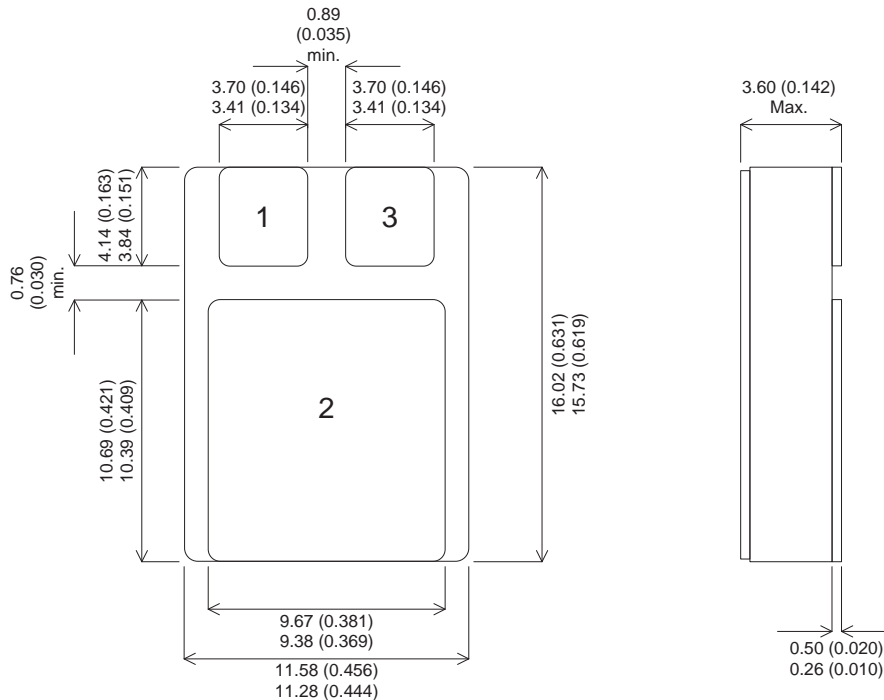
Type	Maximum Reverse Leakage Current			Breakdown Voltage ⁽¹⁾			
	I_{RM}	I_{RM} $T_A=25^\circ\text{C}$	V_{RM}	V_{BR} min.	V_{BR} max.	V_{BR} min. $T_A=-55^\circ\text{C}$	I_R
Bi-Directional	μA	μA	V	V	V	V	mA
TVS15K12CA	10	200	12	13.3	14.7	11.9	5
TVS15K18CA	10	200	17	18.9	20.9	17.3	5
TVS15K24CA	10	200	24	26.7	29.5	23.9	5
TVS15K30CA	10	200	30	33.3	36.8	29.8	5
TVS15K33CA	10	200	33	36.7	40.7	32.8	5
TVS15K40CA	10	200	40	44.4	49.1	39.7	5
TVS15K64CA	10	200	64	71.1	78.6	63.6	5

Notes

(1) Tested with Pulse Width $\leq 50\text{ms}$, $\delta \leq 2\%$

MECHANICAL DATA

Dimensions in mm (Inches)



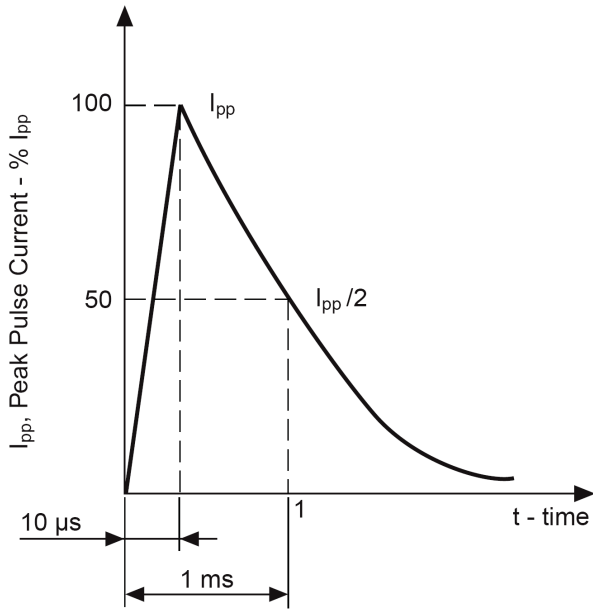
SMD1 (TO-276AB)

Pads 1 & 3 are connected internally

Soldering temperature should be 260°C for a maximum of 10 seconds.

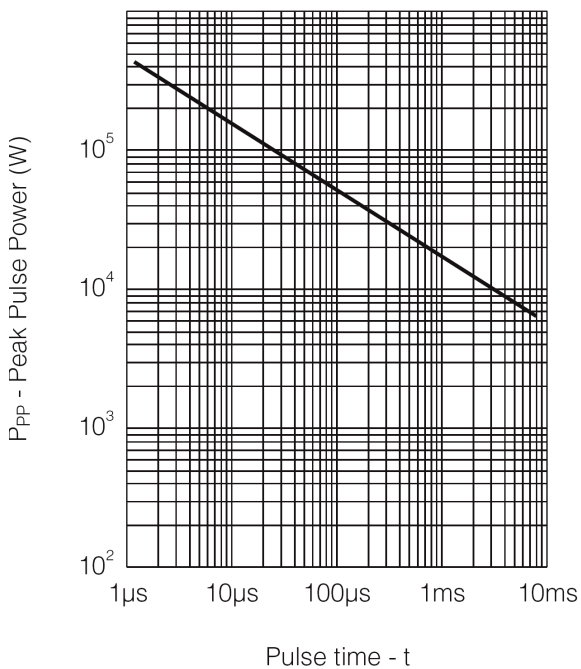
BI-DIRECTIONAL TRANSIENT VOLTAGE SUPPRESSOR SMLTVS15KXXCASMD

TYPICAL PERFORMANCE



Pulse wave form 10/1000

PEAK PULSE POWER RATING CURVE



DERATING CURVE

