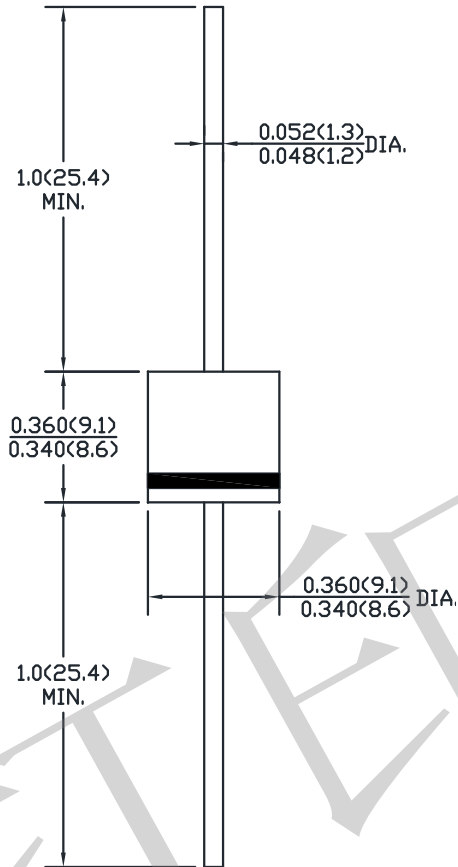


Transient Voltage Suppressor

Breakdown Voltage 48 to 75 V
Peak Pulse Power 65KW

CASE: R-6



Dimensions in inches and (millimeters)

Features

- Breakdown Voltages (V_{BR}) from 48 to 75V
- 65KW peak pulse power capability with a 6.4/69 μ s waveform, repetitive rate (duty cycle):0.01%
- Fast Response Time
- Low incremental surge resistance
- Excellent clamping capability
- Available in uni-directional and bi-directional
- High temperature soldering guaranteed: 265°C /10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension

Application

- Use in sensitive electronics protection against voltage transients induced by inductive load switching and lighting on ICs, MOSFE, signal lines of sensor units for consumer, computer, industrial, automotive and telecommunication

Mechanical Data

- **Case:** Void-free transfer molded thermosetting epoxy body meeting UL94V-O
- **Terminals:** Tin-Lead or ROHS Compliant annealed matte-Tin plating readily solderable per MIL-STD-750, Method 2026
- **Marking:** Body marked with part number
- **Polarity:** Band denotes cathode. Bidirectional not marked.
- **Weight:** 2.1g (Approximately)

Maximum Ratings and Electrical Characteristics @ 25°C unless otherwise specified

Symbol	Conditions	Value	Unit
P_{PPM}	Peak pulse power capability with a 6.4/69 μ s	65	KW
I_{PPM}	Peak pulse current with a 6.4/69 μ s	SEE TABLE 1	A
$P_{M(AV)}$	Steady state power dissipation at $T_L=25^\circ\text{C}$, Lead lengths 0.375"(10mm)	7	W
$R_{\theta JL}$	Thermal resistance junction to lead	17.5	$^\circ\text{C/W}$
$R_{\theta JA}$	Thermal resistance junction to ambient	77.5	$^\circ\text{C/W}$
T_J, T_{STG}	Operating and Storage Temperature	-65 to +150	$^\circ\text{C}$

Electrical Characteristics @ 25°C (Unless Otherwise Noted) TABLE1

Microsemi Part Number (replace A suffix with CA for bidirectional)	Breakdown Voltage V_{BR} @ I_{BR}			Working Stand Off Voltage $V_{WM}(V)$	Maximum Standby current I_D @ V_{WM}	Maximum Peak Pulse Current I_{PP} (A)	Maximum Clamping Voltage V_C @ I_{PP}
	MIN	MAX					
	$V_{BR}(V)$		$I_{BR}(mA)$				
RT65KP48A	53.3	58.93	5	48.0	5	836.0	77.7
RT65KP54A	60.0	66.34	5	54.0	5	742.0	87.5
RT65KP60A	66.7	73.74	5	60.0	5	668.0	97.3
RT65KP75A	83.3	92.10	5	75.0	5	533.0	122.0

Note1. For bidirectional construction, indicate a CA suffix after the part number, i.e. RT65KP75CA.

Characteristic Curve

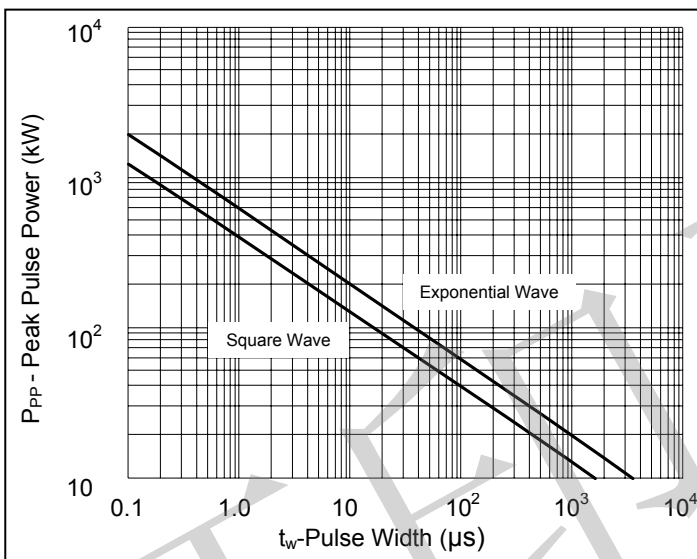


Fig. 1 Peak Pulse Power vs. Pulse Time To 50% of Exponentially Decaying Pulse

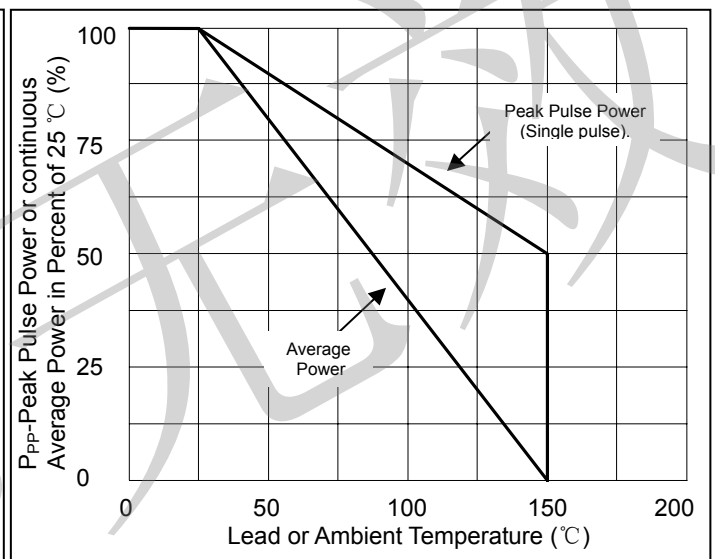


Fig. 2 Derating Curve