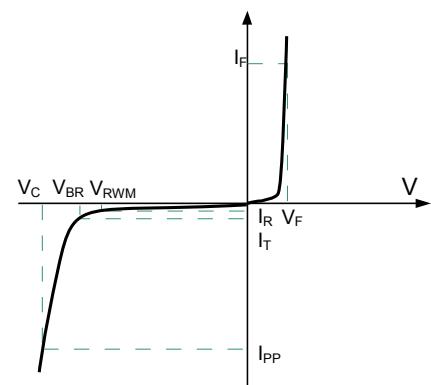


**ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise noted)**

Symbol	Parameter
V <sub>RWM</sub>	Peak Reverse Working Voltage
I <sub>R</sub>	Reverse Leakage Current @ V <sub>RWM</sub>
V <sub>BR</sub>	Breakdown Voltage @ I <sub>T</sub>
I <sub>T</sub>	Test Current
I <sub>PP</sub>	Maximum Reverse Peak Pulse Current
V <sub>C</sub>	Clamping Voltage @ I <sub>PP</sub>
P <sub>PP</sub>	Peak Pulse Power
C <sub>J</sub>	Junction Capacitance
I <sub>F</sub>	Forward Current
V <sub>F</sub>	Forward Voltage @ I <sub>F</sub>



**Electrical Characteristics @ 25°C (Unless Otherwise Specified)**

**SM05**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	V <sub>RWM</sub>				5	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>T</sub> = 1mA	6.2		7.3	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> = 5V			10	µA
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 10mA			0.9	V
Peak Pulse Current	I <sub>PP</sub>	t <sub>p</sub> =8/20µs			12	A
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> =1A, t <sub>p</sub> =8/20µs			9.8	V
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> = 0V, f = 1MHz, Pin 1 to Pin 3		110		pF

**SM12**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	V <sub>RWM</sub>				12	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>T</sub> = 1mA	13.3		15.75	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> = 12V			1	µA
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 10mA			0.9	V
Peak Pulse Current	I <sub>PP</sub>	t <sub>p</sub> =8/20µs			11.2	A
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> =1A, t <sub>p</sub> =8/20µs			19	V
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> = 0V, f = 1MHz, Pin 1 to Pin 3		60		pF

## Curve Characteristics

Fig. 1 - 8 X 20μs Pulse Waveform

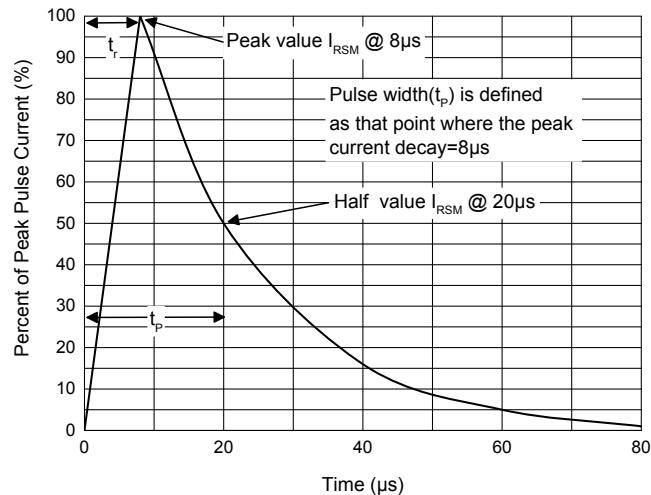
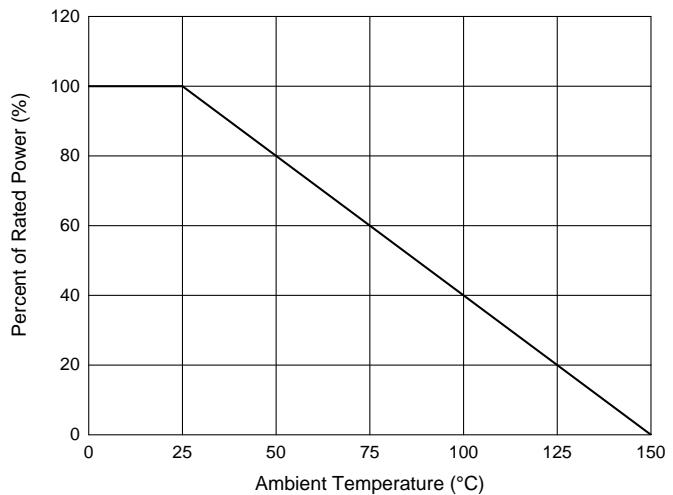


Fig. 2 - Pulse Derating Curve



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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