

Features

- Glass passivated chip
- 400 W peak pulse power capability with a 10/1000 us waveform, repetitive rate (duty cycle):0.01 %
- Excellent clamping capability
- Low reverse leakage
- Very fast response time
- Lead and body according with RoHS standard

Mechanical Data

- Case: DO214AC/(SMA) Molded plastic
- Lead: Solderable per MIL-STD-750, method 2026
- Epoxy: UL 94V-0 rate flame retardant
- Polarity: Color band denotes cathode end except Bipolar
- Mounting position: Any

Maximum Ratings & Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	Value	Unit
Peak power dissipation with a 10/1000 us waveform ⁽¹⁾	P_{PP}	400	W
Peak pulse current with a 10/1000 us waveform ⁽¹⁾	I_{PP}	See Next Table	A
Power dissipation on infinite heatsink at TL = 75 °C	P_D	3.3	W
Peak forward surge current, 8.3 ms single half sinewave unidirectional only ⁽²⁾	I_{FSM}	40	A
Maximum instantaneous forward voltage at 100 A for unidirectional only	V_F	3.5/6.5	V
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150	°C

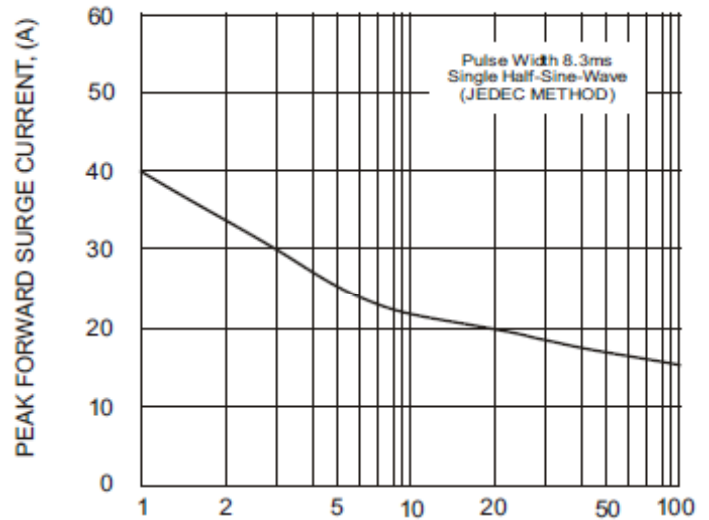
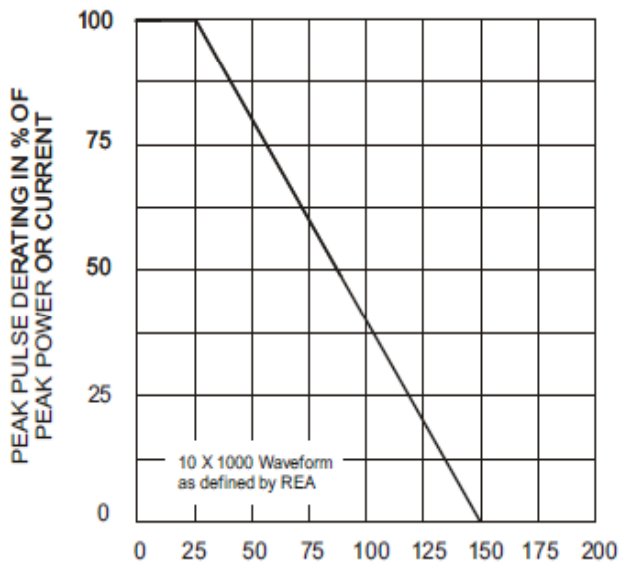
Note:

1) Non-repetitive current pulse per Fig.5 and derated above $T_A = 25\text{ °C}$ per Fig.1 ;

2) Measured on 8.3 ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum ;

Part Number		Reverse Stand-off Voltage	Breakdown Voltage $V_{BR} @ I_T$		Test Current	Max. Clamping Voltage @ I_{PP}	Max. Peak Pulse Current	Max. Reverse Leakage @ V_{RWM}
UNI-POLAR	BI-POLAR	$V_{RWM}(V)$	Min.(V)	Max.(V)	$I_T(mA)$	$V_{C MAX.}(V)$	$I_{PP}(A)$	$I_R(\mu A)$
SMAJ3.3LIR	--	3.30	4.2	6.1	10	9.2	43.5	100

Ratings and Characteristics Curves (TA=25°C unless otherwise noted)



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Fig. 1 - Pulse Derating Curve

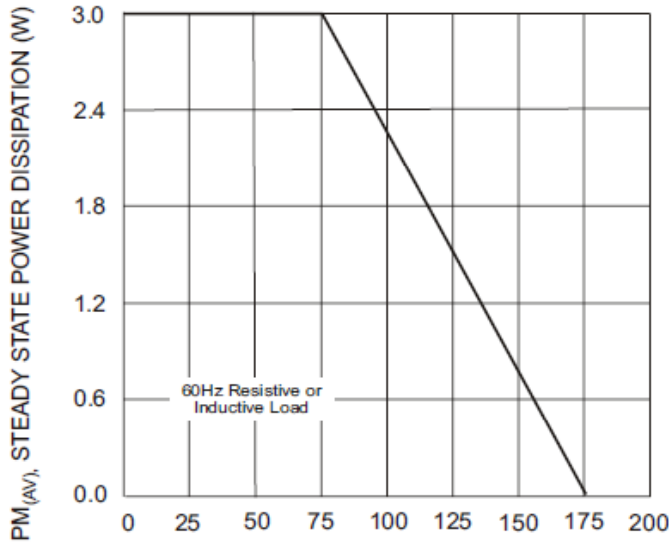


Fig. 2 - Maximum Non-Repetitive Surge Current

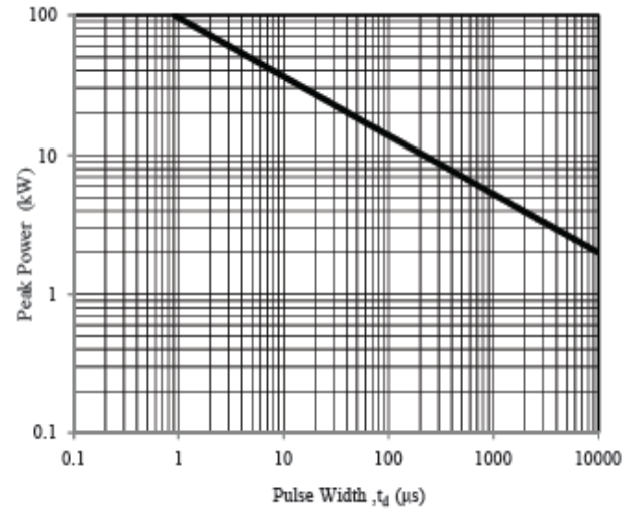


Fig. 3 - Steady State Power Derating Curve

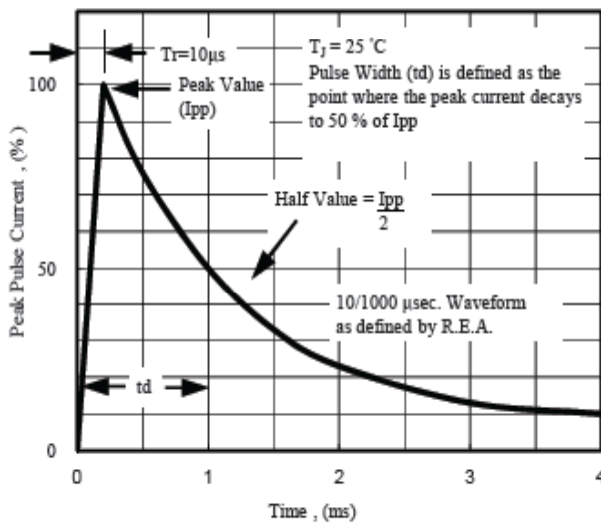


Fig. 5 - Pulse Waveform

Fig. 4 - Peak Pulse Power Rating Curve

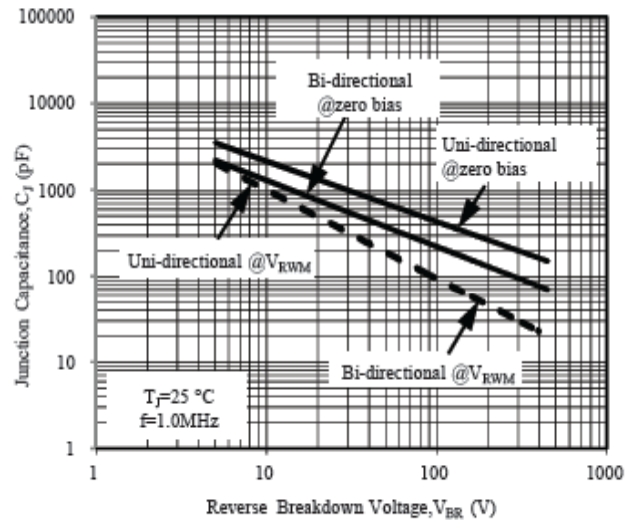


Fig. 6 - Typical Junction Capacitance