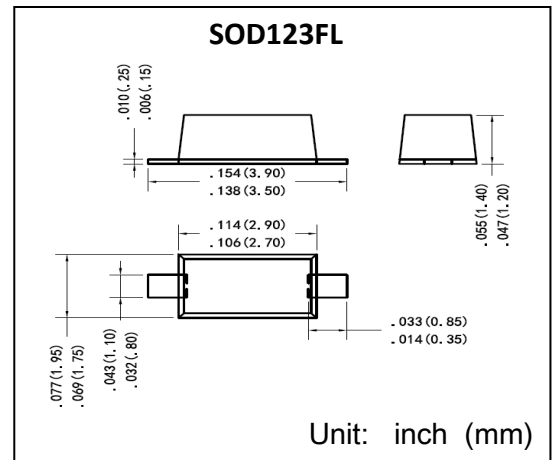


Feature

- Glass Passivated Chip
- 200W Peak Pulse Power Capability With a 10/1000us 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: SOD123FL 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



Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Power Dissipation With a 10/1000 us Waveform ¹⁾	P_{PP}	200	W
Peak Pulse Current With a 10/1000 us Waveform ¹⁾	I_{PP}	25	A
Power Dissipation on Infinite Heatsink at $T_L = 75^{\circ}\text{C}$	P_D	1.0	W
Peak Forward Surge Current, 8.3 ms Single Half Sinewave Unidirectional Only ²⁾	I_{FSM}	20	A
Maximum Instantaneous Forward Voltage at 25A For Unidirectional Only	V_F	3.5	V
Junction Temperature	T_J	-55 ~ +150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

Note:

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

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

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

Part Number	Reverse Stand-off Voltage	Breakdown Voltage VBR (Volts) @ IT		Test Current	Maximum Clamping Voltage	Maximum Peak Pulse Current	Maximum Reverse Leakage	Marking
		MIN	MAX					
UNI	V_R (V)			I_T (mA)	$V_C @ I_{PP}$ (V)	I_{PP} (A)	$I_R @ V_R$ (μA)	UNI
SMF3.3A	3.3	5.2	6.2	10	8	25	800	HZ

Typical Characteristics

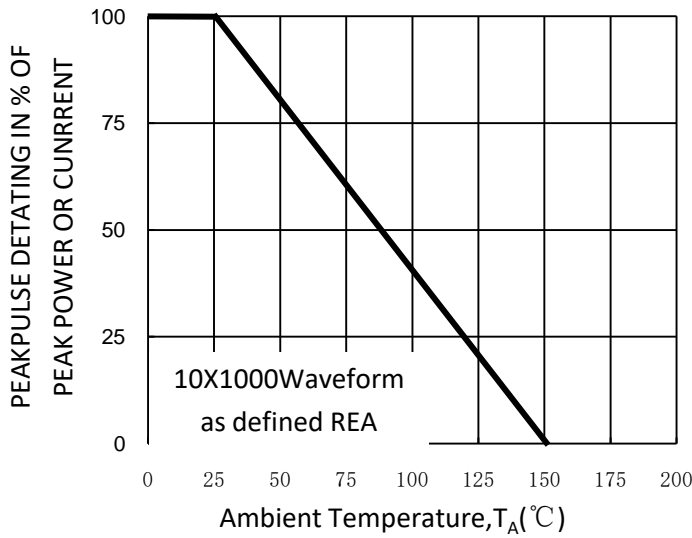


Fig. 1-Pulse Derating Curve

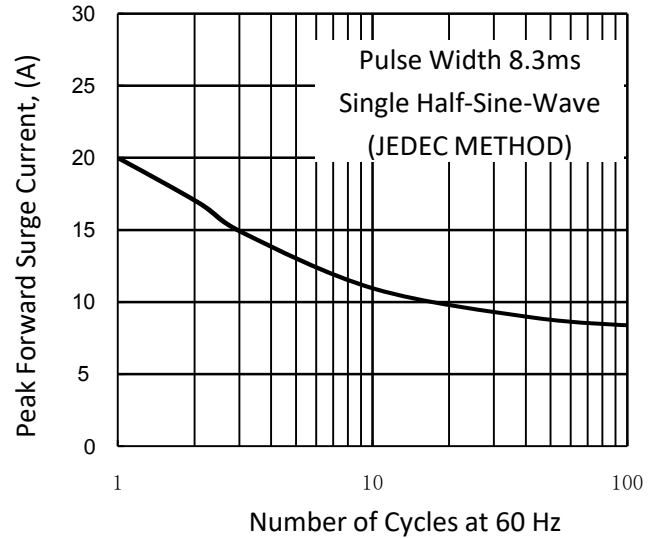


Fig. 2-Maximum Non-Repetitive Surge Current

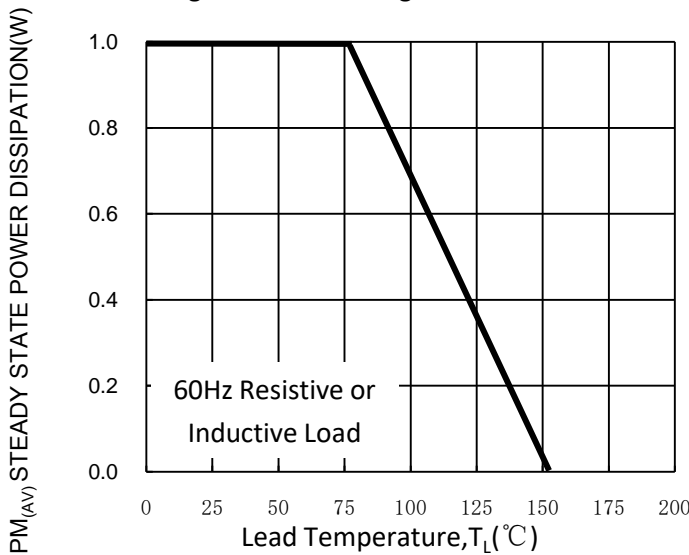


Fig. 3-Steady State Power Derating Curve

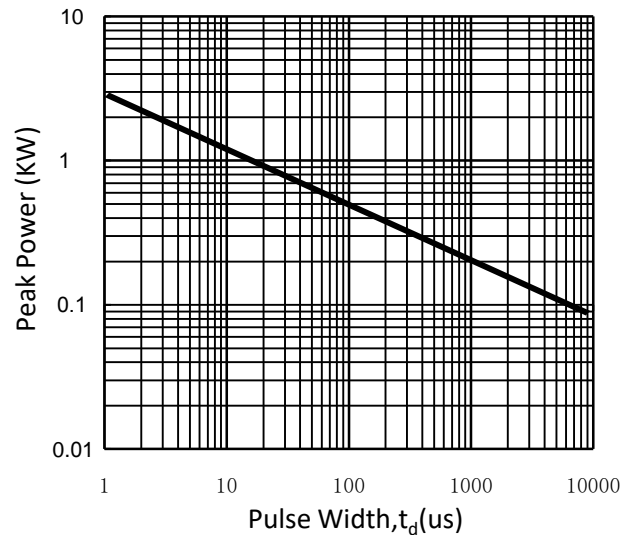


Fig. 4-Peak Pulse Power Rating Curve

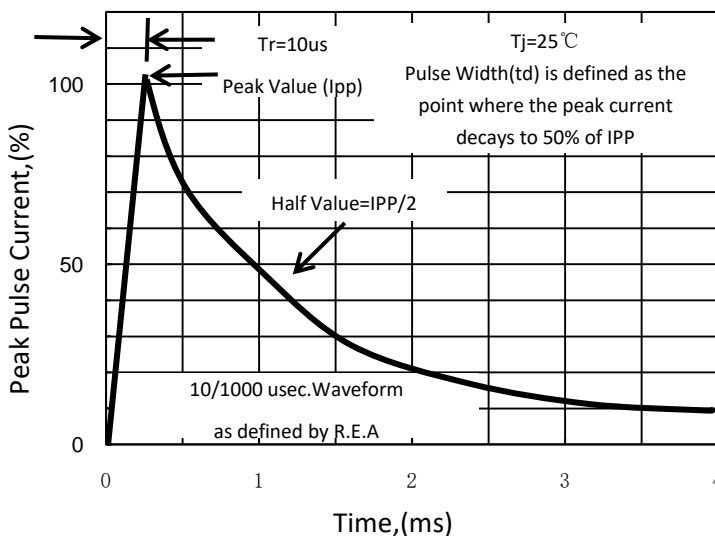


Fig. 5-Pulse Waveform

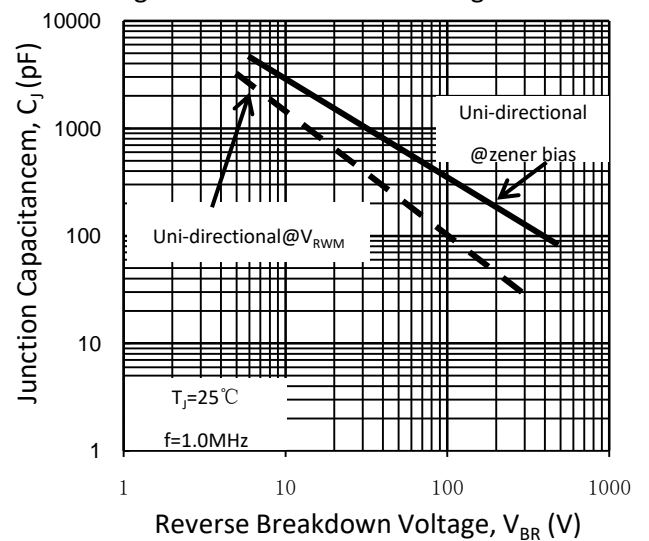


Fig. 6-Typical Junction Capacitance

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- GreenPower Electronics reserves the right to improve product design function and reliability without notice.
- Any and all semiconductor products have certain probability to fail or malfunction, which may result in personal injury, death or property damage. Customer are solely responsible for providing adequate safe measures when design their systems.
- GreenPower Electronics products belong to consumer electronics or other civilian electronic products.