

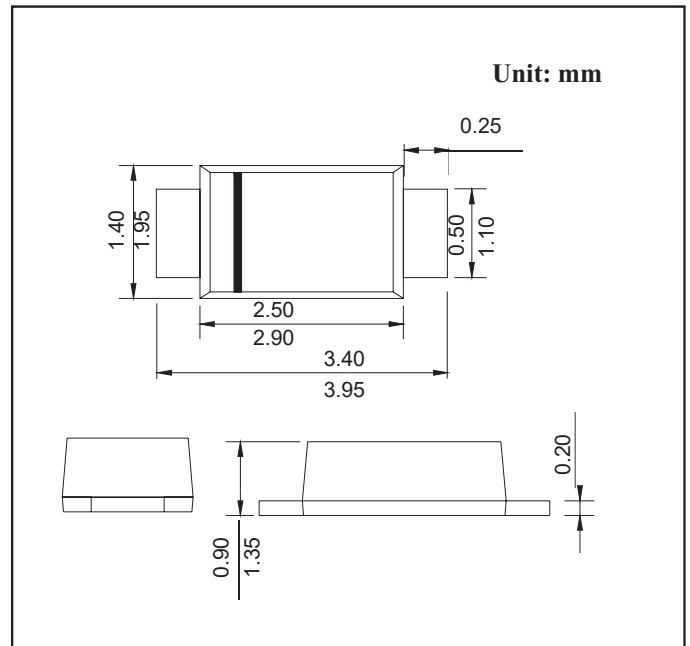
SOD123FL PLASTIC SILICON RECTIFIERS

FEATURES

- Low profile space
- Ideal passivated chip junctions
- Low forward voltage drop
- High forward surge capability
- High temperature soldering guaranteed: 260 °C/10 seconds at terminals
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/EU

MECHANICAL DATA

- Case: SOD-123FL molded plastic body over glass passivated chip
- Terminals: Solder plated, solderable per J-STD-002B and JESD22-B102D
- Polarity: Color band denotes cathode end



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Characteristic	SYMBOLS	SOD4001	SOD4002	SOD4003	SOD4004	SOD4005	SOD4006	SOD4007	UNITS
		DSR1A	DSR1B	DSR1D	DSR1G	DSR1J	DSR1K	DSR1M	
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum DC blocking voltage	V_{DC}								
Maximum RMS Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average rectified output current	$I_{O(AV)}$	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load(JEDECmethod)	I_{FSM}	25.0							A
Forward Voltage @IF=1.0A	V_F	1.1							V
Peak Reverse Current at rated DC blocking voltage	@T _A =25°C	5.0							μA
	@T _A =100°C	50.0							
Thermal resistance from junction to ambient(Note 1)	$R_{θJL}$	15							pF
Typical Thermal Resistance Junction to Ambient (Note 2)	$R_{θJA}$	50							°C/W
Operating Temperature Range	T_j	-55 to +175							°C

NOTES:

1. Mounted on FR-4 P.C.B. with 0.9×1.5mm copper pad areas (≈35μm thick)

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

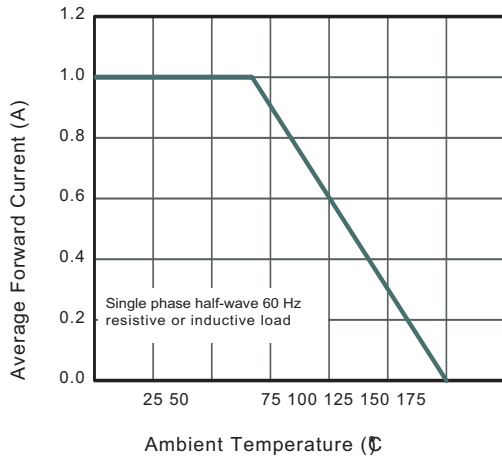


Fig.2 Typical Instaneous Reverse Characteristics

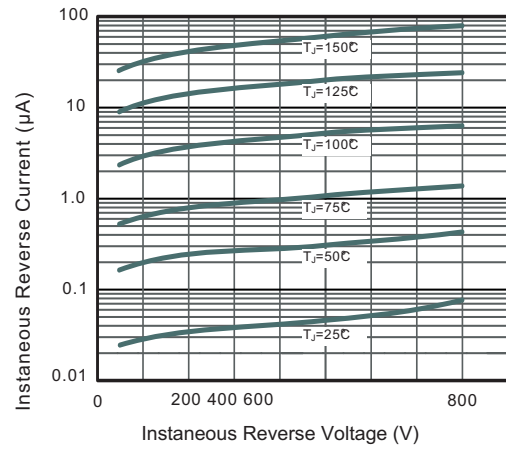


Fig.3 Typical Forward Characteristic

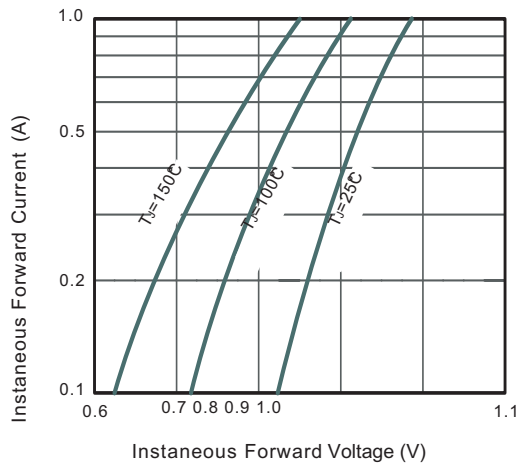


Fig.4 Typical Junction Capacitance

