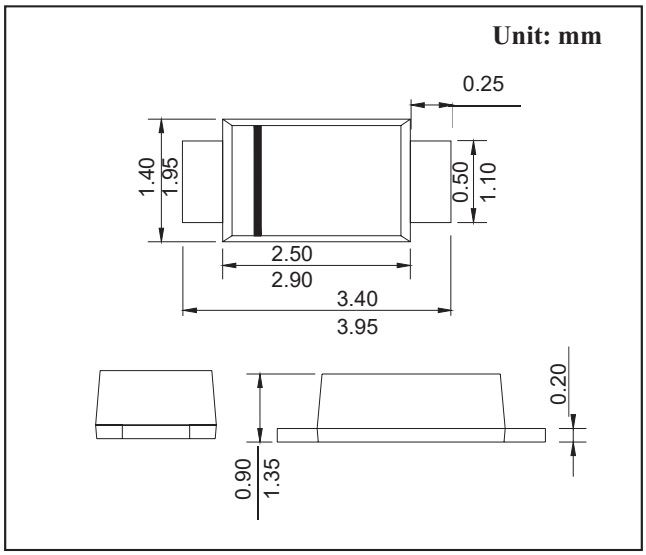
SOD-123FL PLASTIC SILICON RECTIFIERS

FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High reliability
- High temperature soldering guaranteed:260 ℃/10 seconds at terminals
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/EU

MECHANICAL DATA

- Case style: SOD-123FL molded plastic
- Mounting position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Characteristic	SYMBOLS	SOD4001	SOD4002	SOD4003	SOD4004	SOD4005	SOD4006	SOD4007	UNITS
Maximum recurrent peak reverse voltage Maximum DC blocking voltage	V_{RRM} V_{DC}	50	100	200	400	600	800	1000	V
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 @T_A=100°C	I_{RM}	5.0 50.0							μ A
Thermal resistance from junction toambient(Note 1)	$R_{\theta JL}$	15							pF
Typical Thermal Resistance Junction to Ambient (Note 2)	$R_{\theta JA}$	50							℃/W
Operating Temperature Range	T_j	-55 to+175							℃

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

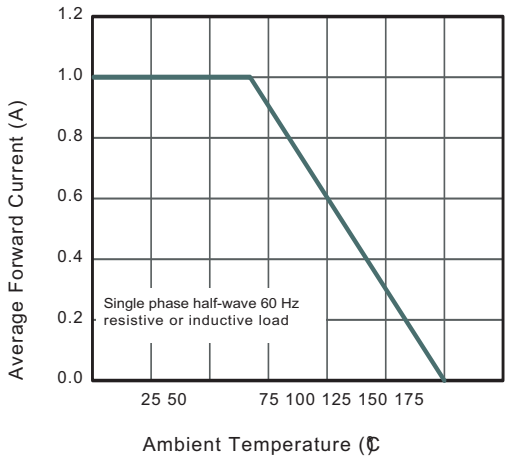


Fig.2 Typical Instaneous Reverse Characteristics

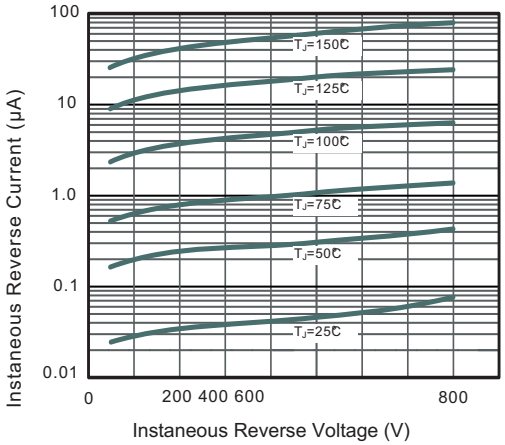


Fig.3 Typical Forward Characteristic

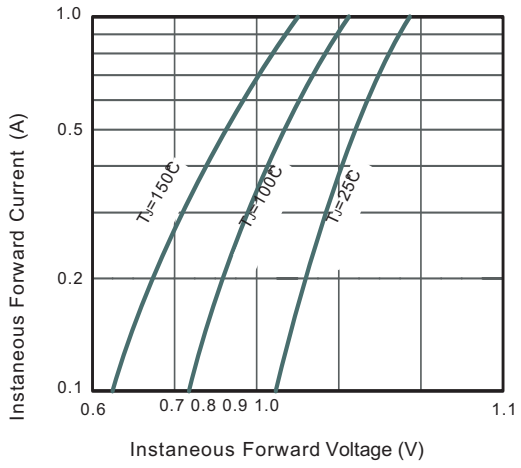


Fig.4 Typical Junction Capacitance