

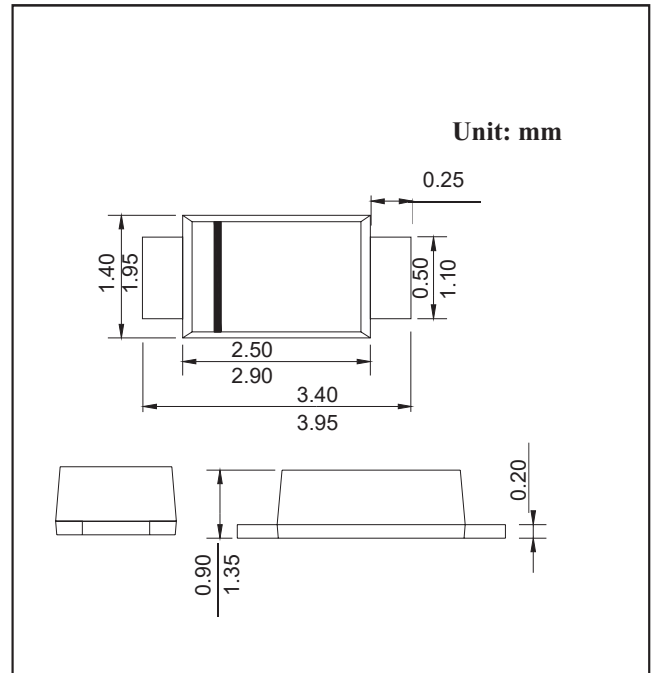
SOD123FL PLASTIC SILICON RECTIFIERS

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing
- For surface mounted applications
- Low power loss, high efficiency
- Built-in strain relief, ideal for automated placement
- High current capability
- High temperature soldering guaranteed: 260 °C/10 seconds at terminals

MECHANICAL DATA

- Case: SOD-123FL molded plastic body
- Polarity: Color band denotes cathode end



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

	Symbols	SS 12	SS 13	SS 14	SS 15	SS 16	SS 18	SS 110	SS 115	SS 120	Volts
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	57	71	105	140	Volts
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward rectified current (See Fig. 1)	$I_{(AV)}$	1.0									Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	40.0									Amps
Maximum instantaneous forward voltage at 1.0 A (note 1)	V_F	0.55		0.75		0.85		0.90		0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Note 1)	$T_A = 25^\circ\text{C}$	0.2									mA
	$T_A = 100^\circ\text{C}$	10.0									
Typical thermal resistance (Note 2)	R_{JA}	88.0									°C/W
	R_{JL}	28.0									
Operating junction temperature range	T_J	- 55 to +150									°C
Storage temperature range	T_{STG}	- 55 to +150									°C

NOTES:

1. Pulse test :300us pulse width, 1% duty cycle
2. P.C.B. mounted with 0.2*0.2"(5.0*5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

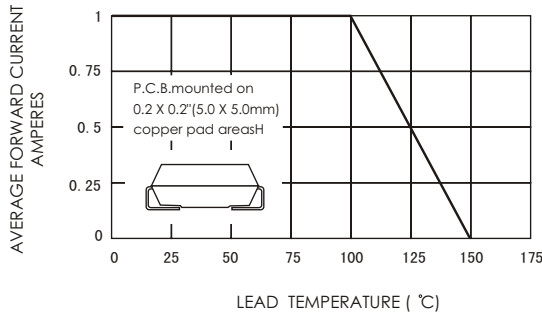


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

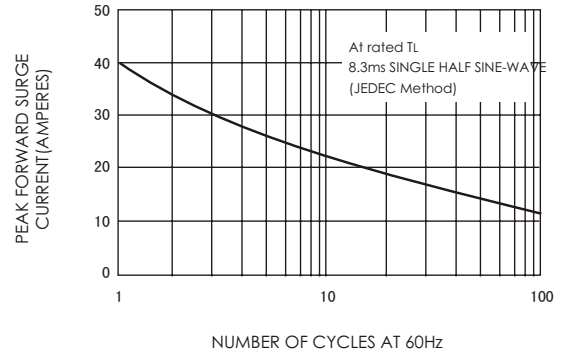


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

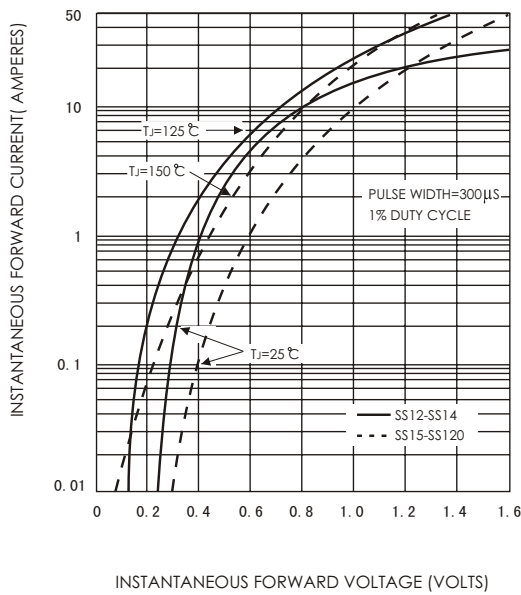


FIG.4-TYPICAL REVERSE CHARACTERISTICS

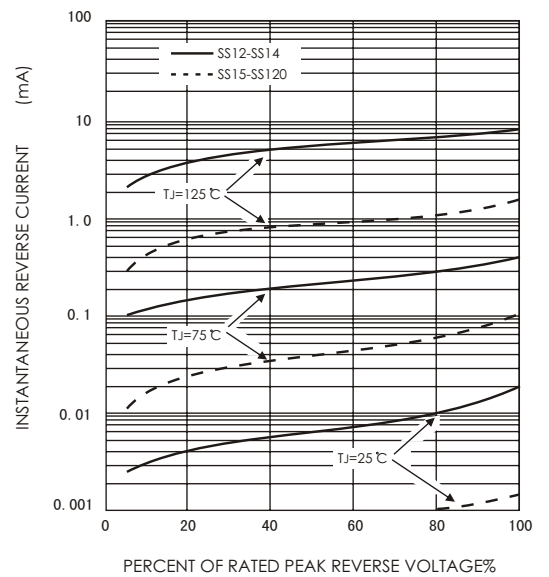


FIG.5-TYPICAL JUNCTION CAPACITANCE

