

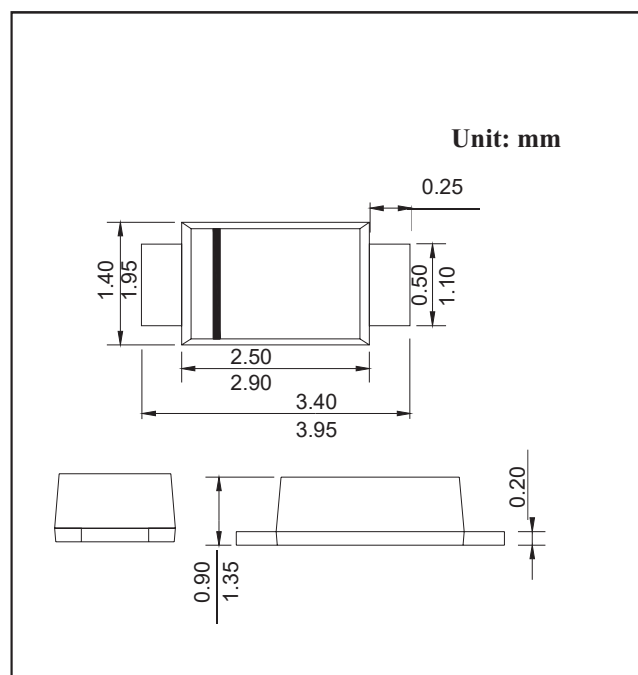
SOD123FL PLASTIC SILICON RECTIFIERS

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°C	I _R	0.2									mA
	T _A =100°C		10.0									
Typical thermal resistance (Note 2)		R _{θJA} R _{θJL}	88.0 28.0									°C/W
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

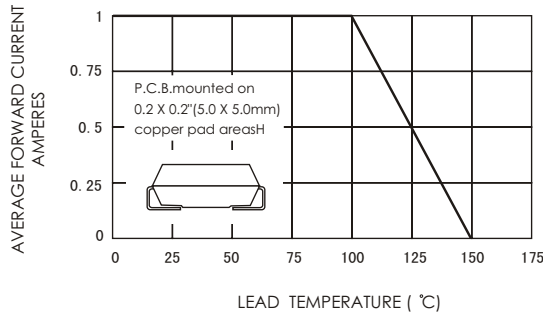


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

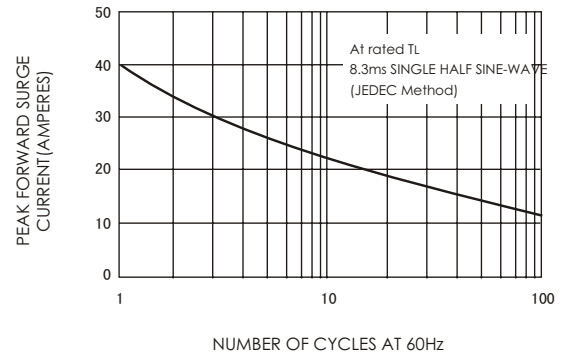


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

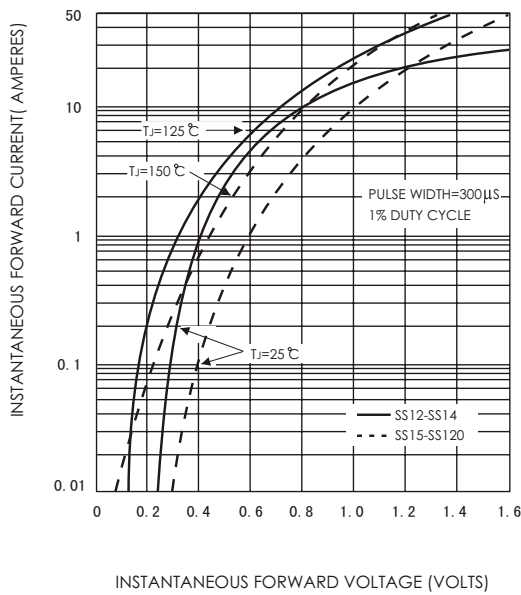


FIG.4-TYPICAL REVERSE CHARACTERISTICS

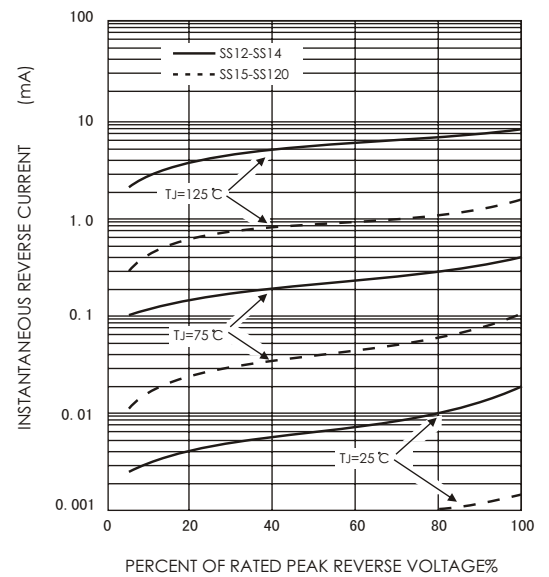


FIG.5-TYPICAL JUNCTION CAPACITANCE

