SS12---SS120

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE: 20--- 200 V
CURRENT: 1.0 A

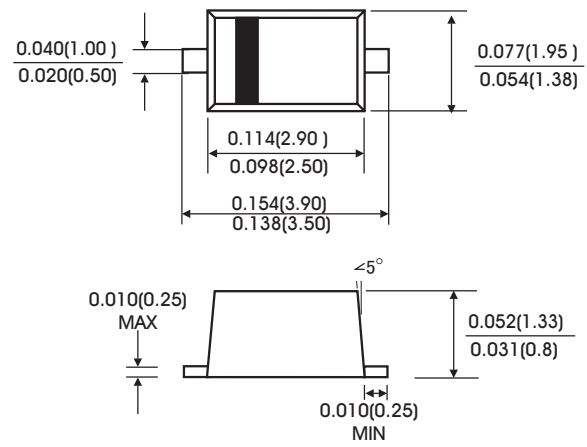
FEATURES

- 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 ℃/10 seconds at terminals
- Component in accordance to RoHS 2002/95/Ec and WEEE 2002/96/EC

MECHANICAL DATA

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

SOD-123FL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)Single phase,half wave,60 Hz,resistive or inductive load.

For capacitive load,derate by 20%.

	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 at1.0 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℃	I_R	0.2									mA
T_A =100℃		10.0									
Typical thermal resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	88.0 28.0									℃/W
Operating junction temperature range	T_J	-65 to+150									℃
Storage temperature range	T_{STG}	-65 to+150									℃

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

2017.6-Rev.A

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

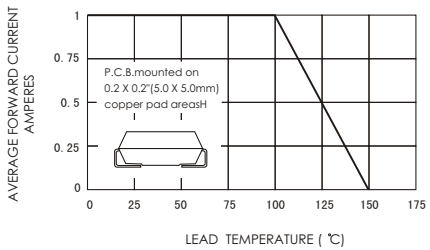


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

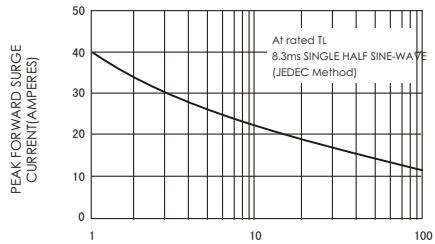


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

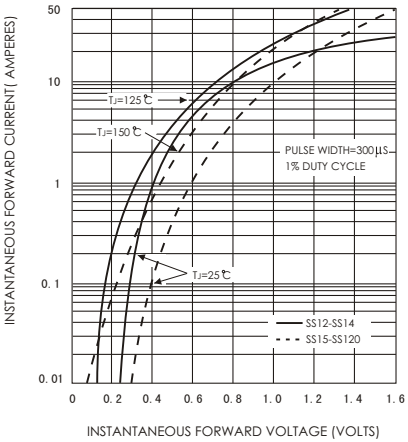


FIG.4-TYPICAL REVERSE CHARACTERISTICS

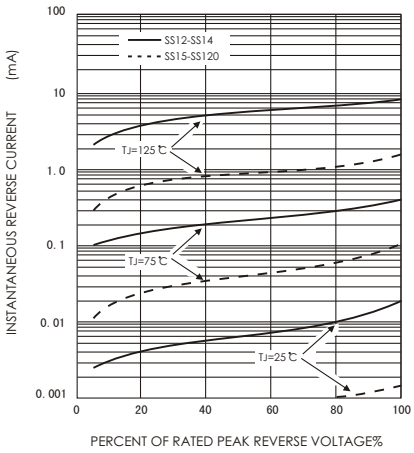


FIG.5-TYPICAL JUNCTION CAPACITANCE