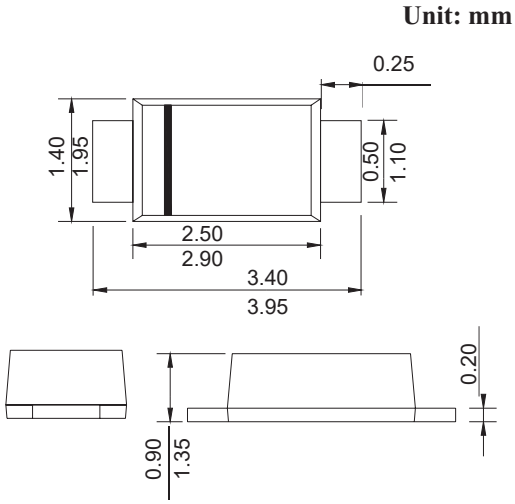
SOD123FL PLASTIC SILICON RECTIFIERS

FEATURES

- ●For surface mounted application
- ●Glass passivated device
- ●Low forward voltage drop
- ●High current capability
- ●Easy pick and place
- ●Plastic materal used carriers Underwriters Laboratory Classification 94V-O
- ●High temperature soldering guaranteed: 250 C/10 seconds

MECHANICAL DATA

- ●Case : JEDEC SOD-123FL molded plastic bodyover
- ●passivated chip
- ●Terminals: Plated axial leads, solderable per MIL-STD-750,Method 2026
- ●Polarity: Color band denotes cathode end Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbols	A1	A2	A3	A4	A5	A6	A7	Unis
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average Forward Rectified Current 0.375"(9.5mm) lead length at T_A=75◦C	$I_{(AV)}$	1.0							Amp
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method) T_A=75°C	I_{FSM}	30.0							Amps
Maximum Instantaneous Forward Voltage at 1.0 A	V_F	1.0							Volts
Maximum Reverse current at rated DC Blocking Voltage T_A =25℃	I_R	5.0							μA
Maximum Reverse current at rated DC Blocking Voltage T_A =100℃	I_R	50. 0							μA
Typical Thermal resistance (Note 2)	$R_{\theta JA}$	65.0							℃/W
Typical Junction Capacitance(Note 1)	C_J	10.0							PF
Maximum DC Blocking Voltage	T_A	+150							℃
temperature Operating and Storage temperature Range	T_J T_{STG}	-5 5 to+150							℃

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V DC.

2.Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm)lead length, P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

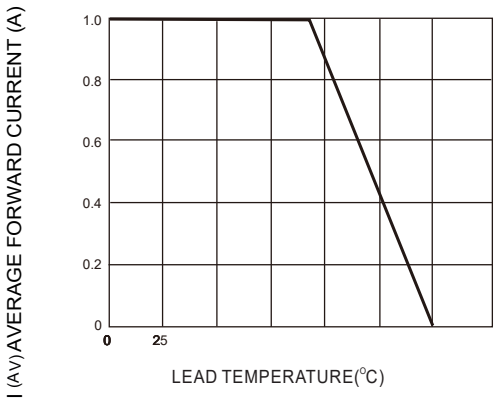


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

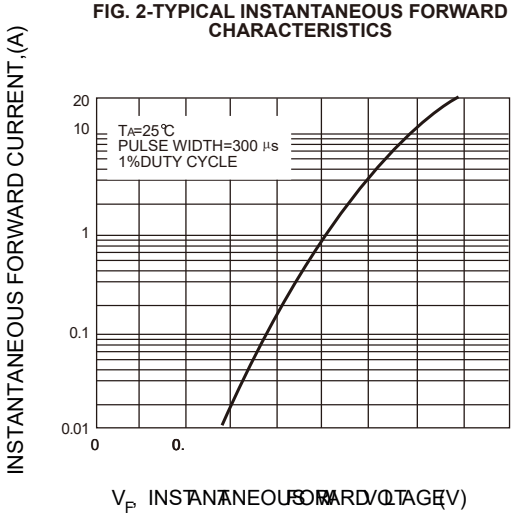


FIG. 3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

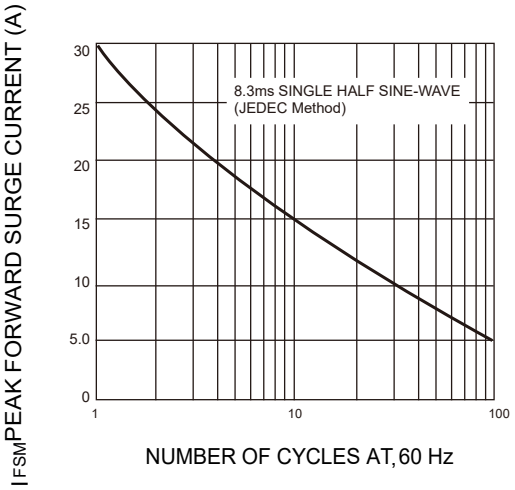


FIG. 4-TYPICAL JUNCTION CAPACITANCE