GM GarboMicro Semiconductor

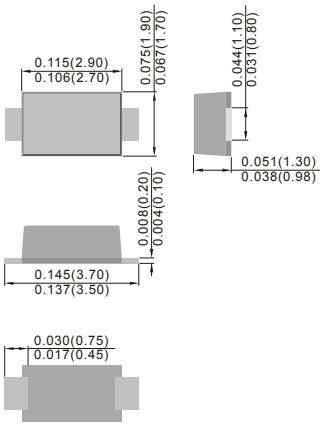
A1 THRU A7
S1A THRU S1M

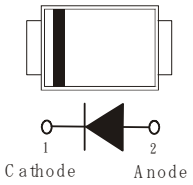
RATING AND CHARACTERTIC CURVES

FEATURES

- Ideal for printed circuit board
  Reliable low cost construction utilizing
  molded plastic technique results in inexpensive product
- High surge current capability
- Small size simple installation

SOD123FL





Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

TYPE NUMBER		S1A	S1B	S1D	S1G	S1J	S1K	S1M	UNITS
		A1	A2	A3	A4	A5	A6	A7	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T_A=75 ℃	$I_{(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I_{FSM}	30							A
Maximum Forward Voltage at 1.0A DC	V_F	1.1							V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking Voltage @T_J=100℃	I_R	5 50							μA
Typical Junction Capacitance (Note1)	C_J	10							pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	30							℃/W
Operating Temperature Range	T_J	-55 to +125							℃
Storage Temperature Range	T_{STG}	-55 to +125							℃

NOTES:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

2.Thermal resistance junction of ambient.

RATING AND CHARACTERTIC CURVES

FIG.1- MAXIMUN FORWARD CURRENT DERATING CURVE

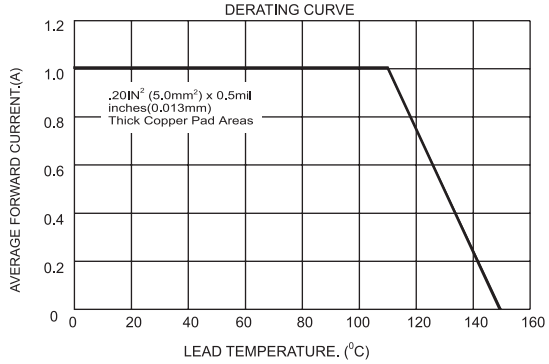


FIG.2-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

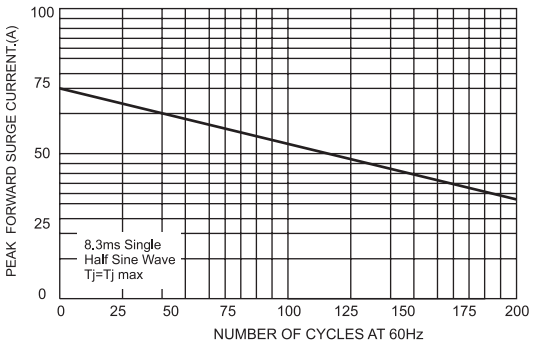


FIG.4-TYPICAL REVERSE CHARACTERISTICS

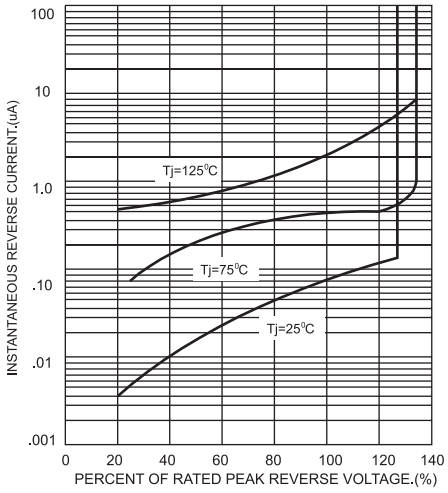


FIG.3-TYPICAL FORWARD CHARACTERISTICS

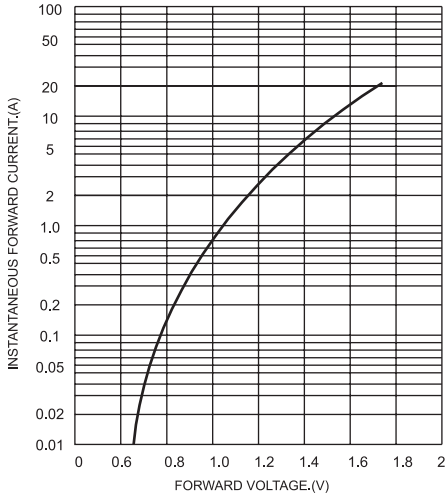


FIG.5-TYPICAL JUNCTION CAPACITANCE