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G1A - G1M

GLASS PASSIVATED JUNCTION SILICON RECTIFIER DIODES

PRV : 50 - 1000 Volts
Io : 1.0 Ampere

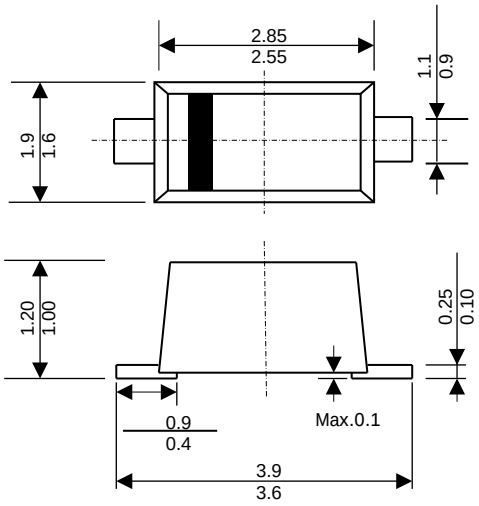
FEATURES :

* Glass passivated junction chip
* High current capability
* High reliability
* Low reverse current
* Low forward voltage drop
* Pb / RoHS Free

MECHANICAL DATA :

* Case: JEDEC SOD-123FL, molded plastic over passivated chip
* Terminals: Tin pated leads, solderable per J-STD-002, JESD22-B102
* Polarity: Color band denotes cathode end
* Mounting position : Any
* Weight: 0.006 ounces, 0.0169 gram

SOD-123FL



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

RATING	SYMBOL	G1A	G1B	G1D	G1G	G1J	G1K	G1M	UNIT
Maximum Repetitive 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 Current 0.375"(9.5mm) Lead Length	$I_{F(AV)}$	1.0							A
Maximum Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Maximum Forward Voltage at I_F = 1.0 Amp.	V_F	1.1							V
Maximum DC Reverse Current Tj = 25 °C	I_R	5.0							µA
at rated DC Blocking Voltage Tj = 125 °C	$I_{R(H)}$	100							µA
Typical Thermal Resistance (Note1)	$R_{\Theta JA}$	70							°C/W
Junction Temperature Range	T_J	- 55 to + 150							°C
Storage Temperature Range	T_{STG}	- 55 to + 150							°C

Notes : (1) Thermal resistance between Junction and ambient and between junction and lead mounted on P.C.B with 3 x 3 mm copper pad area

RATING AND CHARACTERISTIC CURVES (G1A - G1M)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

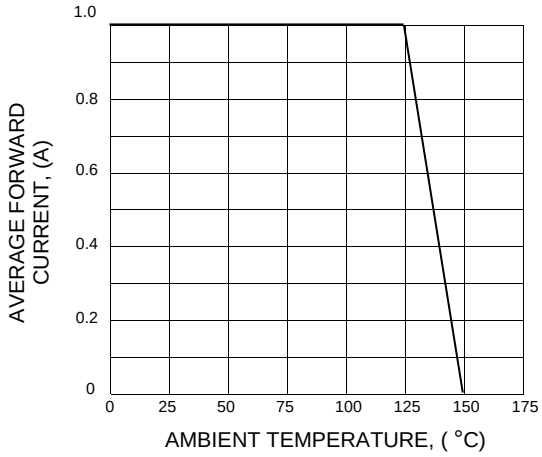


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

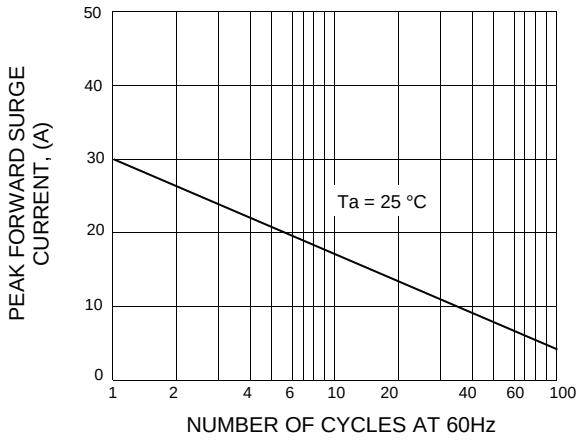


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

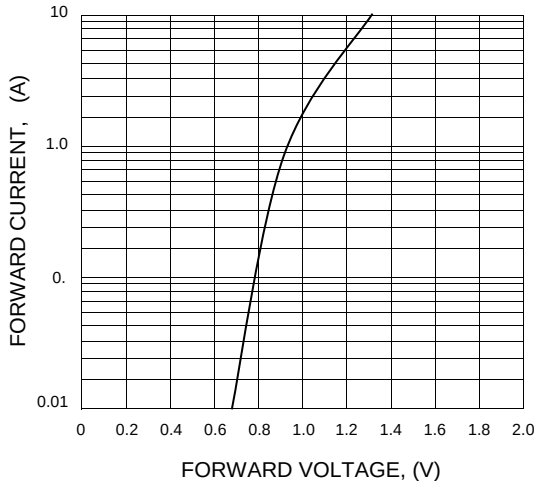


FIG.4 - TYPICAL REVERSE CHARACTERISTICS