GS1MH-E

SURFACE MOUNT
GLASS PASSIVATED RECTIFIER

VOLTAGE：1000V **CURRENT：1.0A**

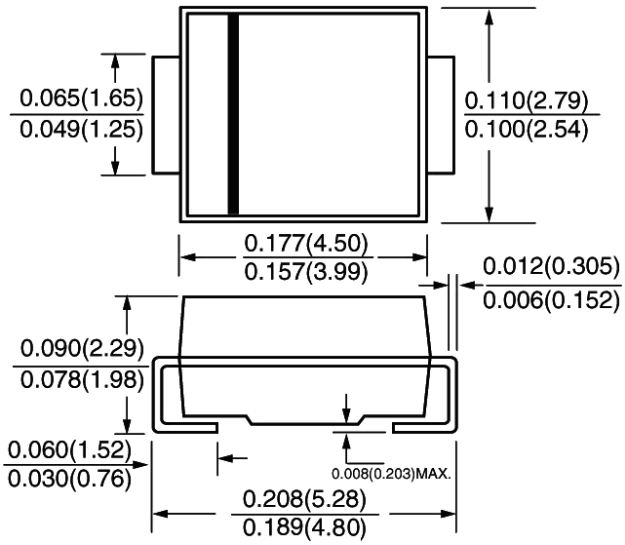
FEATURE

Ideal for surface mount pick and place application
Low profile package
Built-in strain relief
High surge capability
High temperature soldering guaranteed
260℃/10sec/at terminals
Halogen Free

MECHANICAL DATA

Terminal：Solder plated, solderable per MIL-STD 750, method 2026
Case：Molded with UL-94 class V-0 recognized Halogen Free Epoxy
Polarity：color band denotes cathode

SMA / DO-214AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25℃, unless otherwise stated,)

	Symbol	GS1MH-E	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	1000	V
Maximum RMS Voltage	Vrms	700	V
Maximum DC blocking Voltage	Vdc	1000	V
Maximum Average Forward Rectified Current 3/8″lead length	If(av)	1.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	30.0	A
Maximum Instantaneous Forward Voltage at rated Forward current	Vf	1.1	V
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =125℃	Ir	5.0 200.0	μA
Reverse Recovery Time (Note1)	Trr	1000～2000	nS
Typical Junction Capacitance (Note 2)	Cj	15.0	pF
Typical Thermal Resistance (Note 3)	Rth(jl)	30.0	℃/W
Typical Thermal Resistance (Note 4)	Rth(ja)	75.0	℃/W
Storage and Operating Junction Temperature	Tj, Tstg	-50 to +150	℃

Note：
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A, in the test and applications can allowed tolerance range 5%
2. Measured at 1.0 MHz and applied voltage of 4.0Vdc
3. Thermal Resistance from Junction to terminal mounted on 5×5mm copper pad area
4. Thermal Resistance from Junction to ambient

RATINGS AND CHARACTERISTIC CURVES GS1MH-E

Fig. 1 – Forward Current Derating Curve

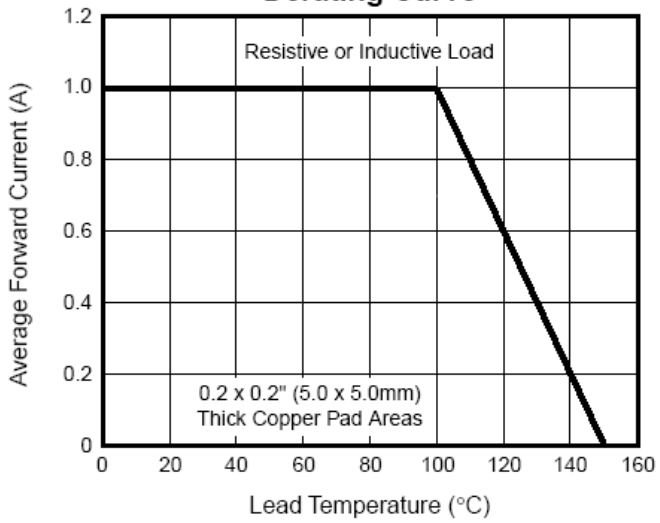


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

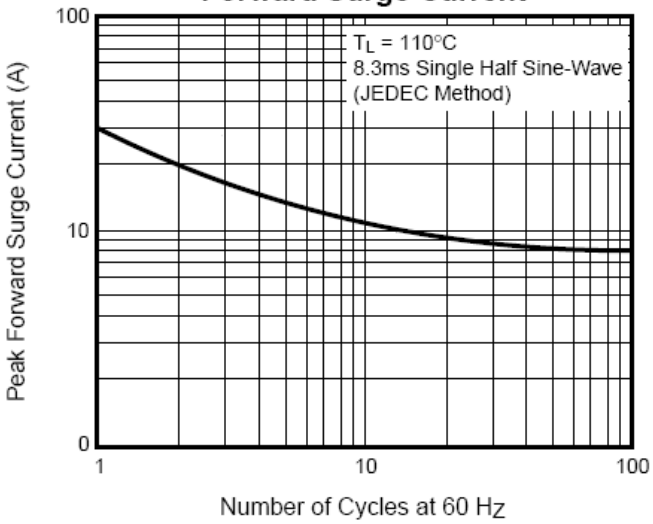


Fig. 3 – Typical Instantaneous Forward Characteristics

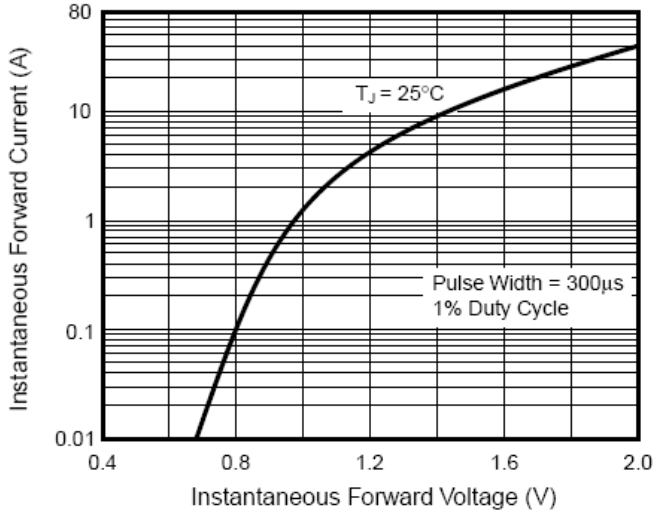


Fig. 4 – Typical Reverse Leakage Characteristics

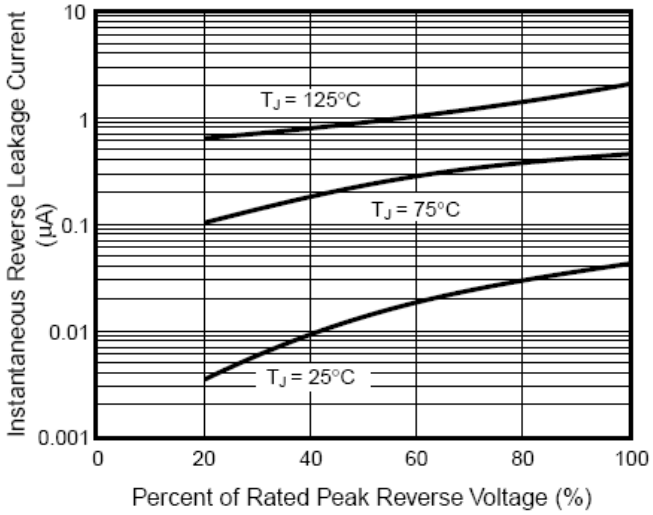


Fig. 5 – Typical Junction Capacitance

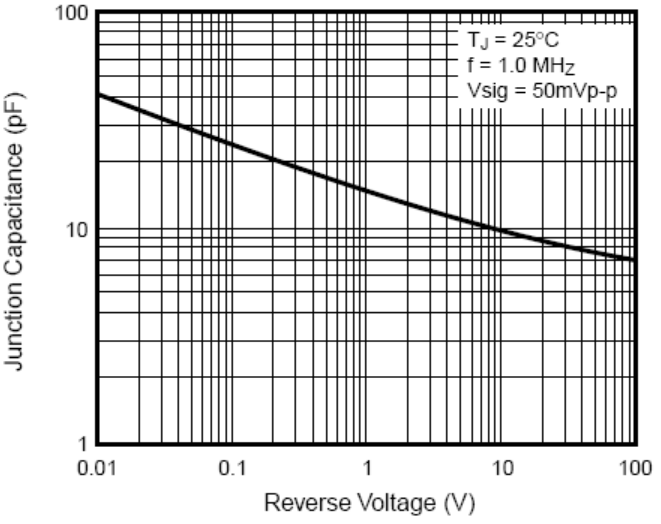


Fig. 6 – Transient Thermal Impedance