GSL1A-R THRU GSL1Q-R

SURFACE MOUNT GLASS PASSIVATED RECTIFIER

VOLTAGE：50 to 1200V CURRENT：1.0A

VOLTARISTECH INC.
POWER · PRECISION · INNOVATION

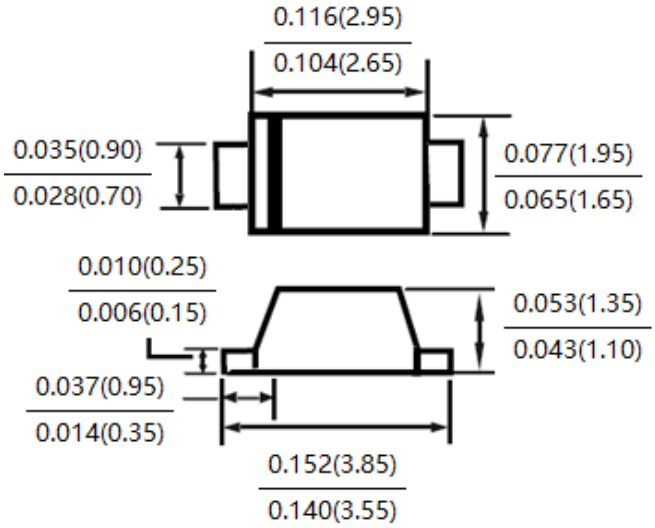
FEATURE

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

MECHANICAL DATA

Terminal: Solderable per J-STD-002
Case: Molded with UL-94 class V-0 recognized Flame Retardant Epoxy
Polarity: color band denotes cathode
Marking: S1A～S1Q

SMF



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	GSL 1A-R	GSL 1B-R	GSL 1D-R	GSL 1G-R	GSL 1J-R	GSL 1K-R	GSL 1M-R	GSL 1Q-R	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	1200	V
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	840	V
Maximum DC blocking Voltage	Vdc	50	100	200	400	600	800	1000	1200	V
Maximum Average Forward Rectified Current 3/8″lead length at T_L =110℃	If(av)	1.0								A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	30								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	5.0 300.0								μA
Typical Junction Capacitance (Note 1)	Cj	9.0								pF
Typical Thermal Resistance (Note 2)	Rth(jl) Rth(ja) Rth(jc)	21 62 22								℃/W
Storage and Operating Junction Temperature	Tj, Tstg	-50 to +150								℃

Note：

1. Measured at 1.0 MHz and applied voltage of 4.0Vdc
2. Thermal Resistance from junction to ambient and from junction to lead mounted on P.C.B. with 3×3mm copper pad area

Fig. 1 – Forward Current Derating Curve

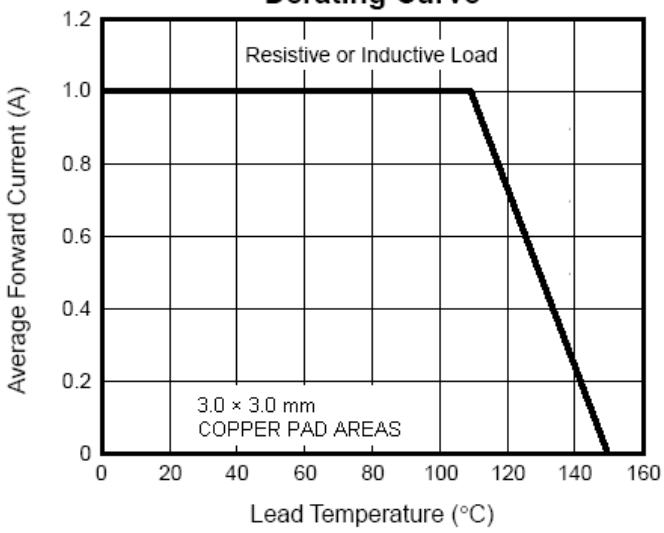


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

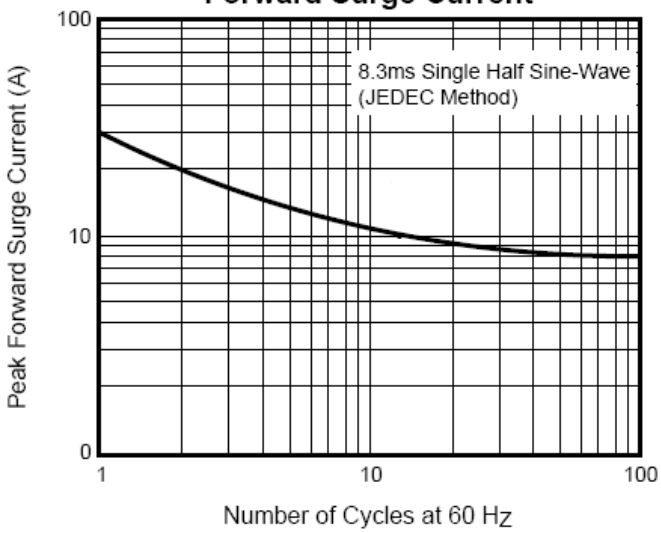


Fig. 3 – Typical Instantaneous Forward Characteristics

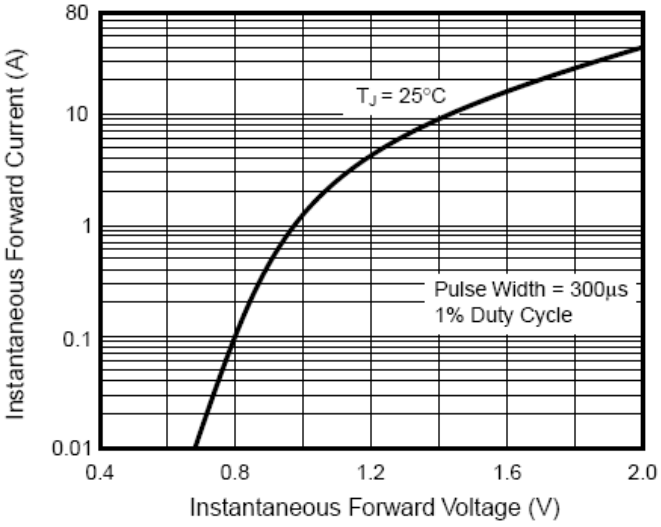


Fig. 4 – Typical Reverse Leakage Characteristics

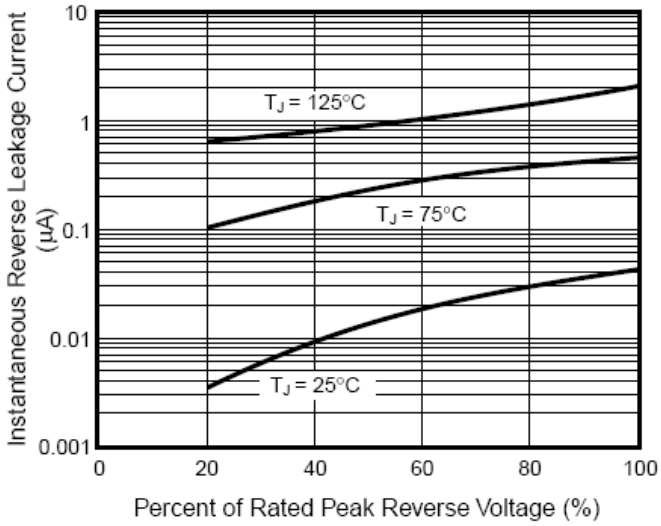


Fig. 5 – Typical Junction Capacitance