

GSB22ML-E

**SINGLE PHASE GLASS PASSIVATED
SURFACE MOUNT BRIDGE RECTIFIER**
VOLTAGE: 1000V CURRENT: 2.2A

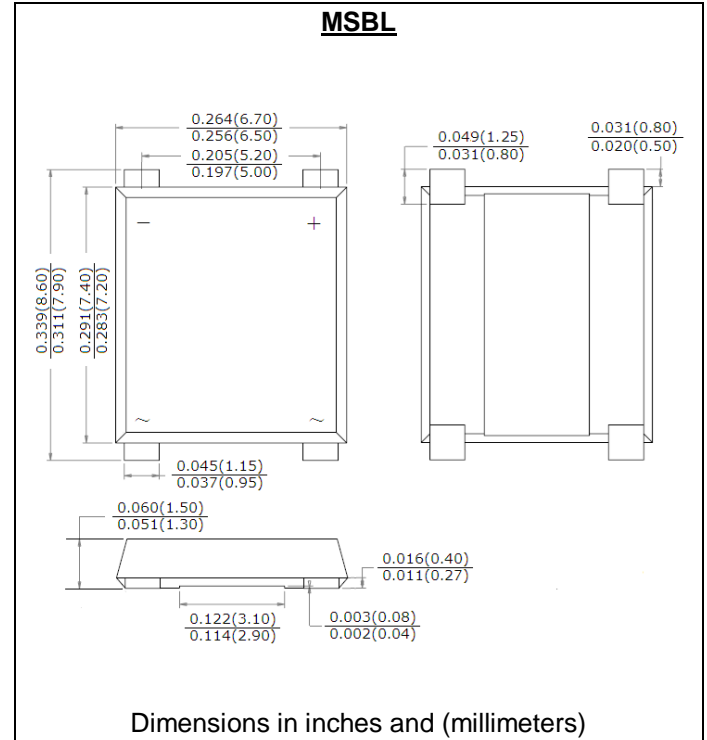


FEATURE

Ideal for SMT manufacturing
Glass passivated chip
Compact, thin profile package design
Reliable low cost construction utilizing molded plastic technique
Low forward voltage
High surge current capability
High temperature soldering guaranteed: 260°C/10 seconds
This series is UL listed under Recognized Component Index, file number E481337
Halogen Free

MECHANICAL DATA

Terminal: Plated leads solderable per J-STD-002
Case: UL-94 Class V-0 recognized Halogen Free Epoxy
Polarity: Polarity symbol marked on body
Marking: GB22ML



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbol	GSB22ML-E	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	1000	V
Maximum RMS Voltage	V _{rms}	700	V
Maximum DC blocking Voltage	V _{DC}	1000	V
Maximum average forward rectified output current	I _{f(av)}	2.2	A
Peak Forward Surge Current 8.3ms single half sine-wave	I _{fsm}	T _j = 25°C 90	A
		T _j = 125°C 70	
Peak forward surge current (t ≤ 1.0ms)	I _{fsm}	T _j = 25°C 180	A
		T _j = 125°C 145	
Rating for fusing(t<8.3ms)	I ² t	33.6	A ² sec
Maximum Instantaneous Forward Voltage at 1.1A	V _f	0.92	V
Maximum DC Reverse Current	I _r	T _a = 25°C 5.0	μA
at rated DC blocking voltage		T _a = 125°C 100.0	
Typical Thermal resistance Junction to case (Note 1)	R _{th(jc)}	9.6	°C/W
Typical Junction Capacitance per element (Note 2)	C _j	35	pF
Storage and Operating Junction Temperature Range	T _{stg} , T _j	-55 to +150	°C

Note:

- Unit mounted on glass-epoxy substrate with 1oz/ft² 20×20mm copper pad per pin with 1oz/ft² 20×20mm copper pad per pin
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc

Fig. 1 - Derating Curve Output Rectified Current

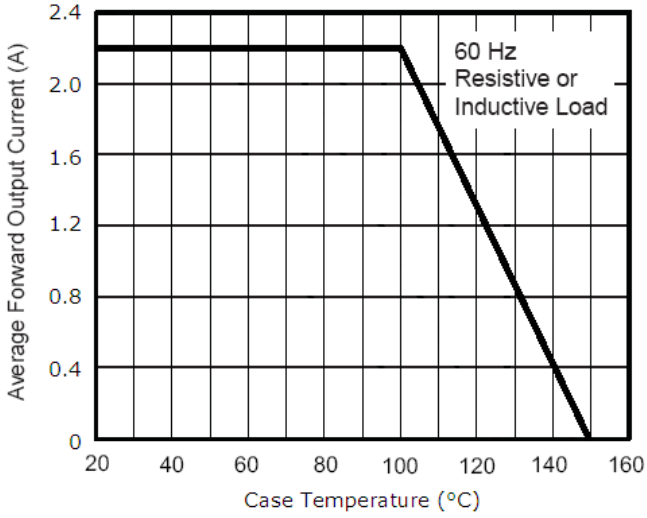


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

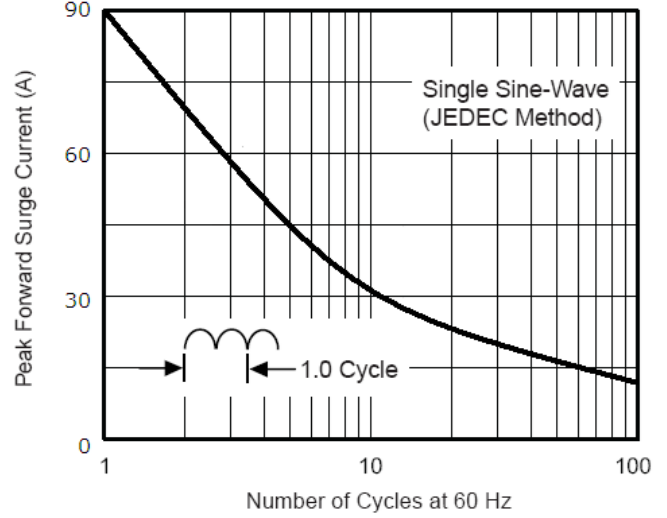


Fig. 3 - Typical Forward Characteristics Per Leg

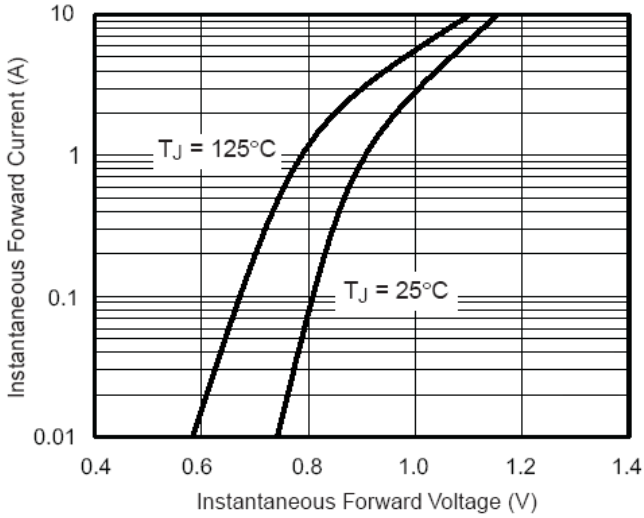


Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

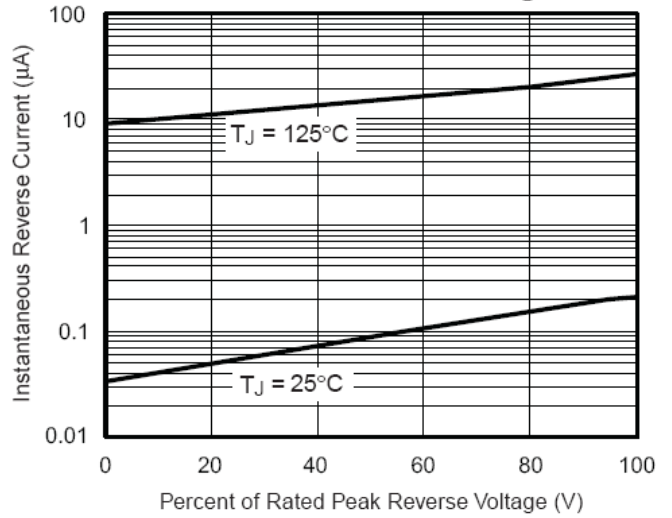
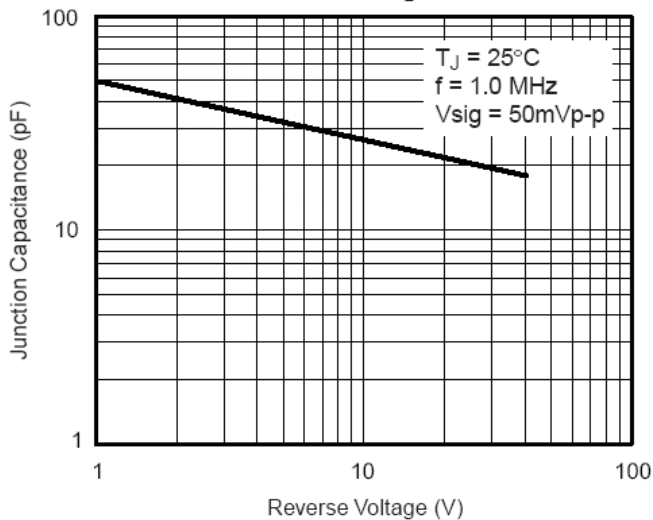


Fig. 5 - Typical Junction Capacitance Per Leg



Maximum Non-Repetitive Peak Forward Surge Current

