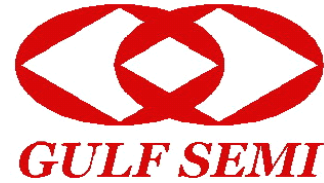


SBYG10D THRU SBYG10Y

SINTERED GLASS JUNCTION SURFACE MOUNTED RECTIFIER

VOLTAGE: 200 to 1600V

CURRENT: 1.5A



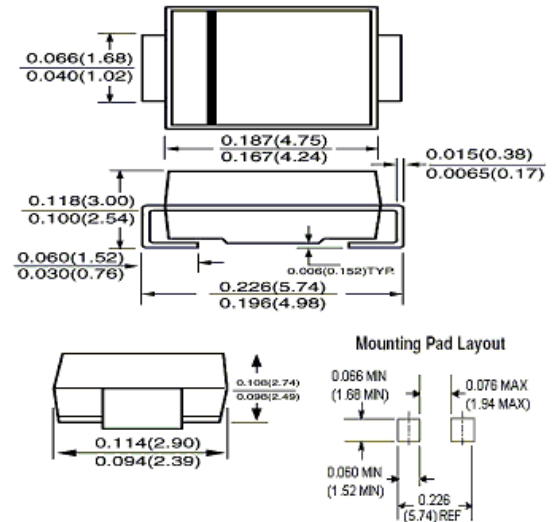
FEATURE

For surface mounted application
High surge current capability
Sintered glass junction
High temperature soldering guaranteed
260°C/10sec/at terminals

MECHANICAL DATA

Terminal: Plated Terminal, solderable per MIL-STD 202E, method 208C
Case: Molded with UL-94 class V-0 recognized Flame Retardant Epoxy
Polarity: color band denotes cathode end
Marking: **B10D B10G B10J B10K B10M B10Y**

GF1/ DO-214BA



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbol	SBYG 10D	SBYG 10G	SBYG 10J	SBYG 10K	SBYG 10M	SBYG 10Y	units	
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	200	400	600	800	1000	1600	V	
Maximum RMS Voltage	V _{rms}	140	280	420	560	700	1120	V	
Maximum DC blocking Voltage	V _{dc}	200	400	600	800	1000	1600	V	
Maximum Average Forward Rectified Current	I _{f(av)}	1.5						A	
Peak Forward Surge Current 10ms single half sine-wave superimposed on rated load	I _{fsm}	30						A	
Maximum Forward Voltage at rated Forward current Ta =25°C	V _f	1.15						V	
Pulse energy in avalanche mode, non repetitive (inductive load switch off) at I _{(BR)R} =1A	E _r	20						-	mJ
Maximum DC Reverse Current at rated DC blocking voltage Ta =25°C Ta =125°C	I _r	1.0 50.0						μA	
Typical Thermal Resistance (Note 1)	R _{th(ja)} R _{th(jl)}	80 26						°C/W	
Operating and Storage Temperature Range	T _j , T _{stg}	-65 to +175						°C	

Note:

1. Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2×0.2"(5.0×5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES SBYG10J THRU SBYG10Y

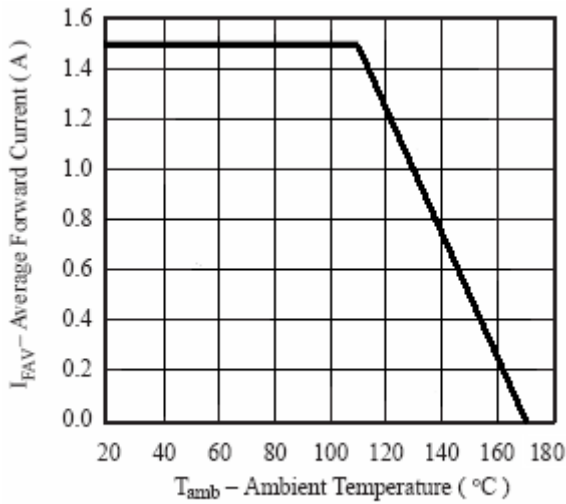


Figure 1. Max. Average Forward Current

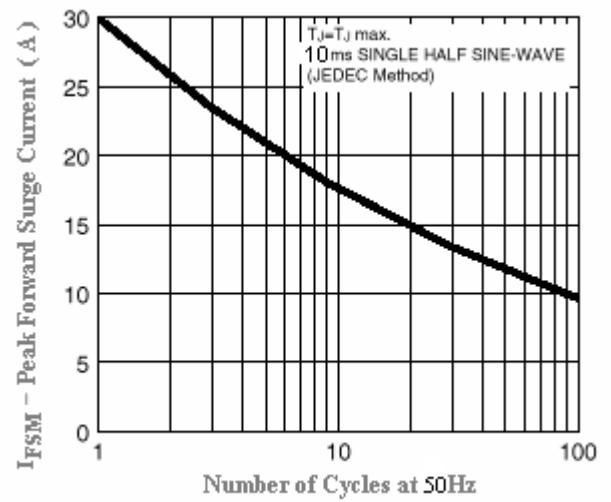


Figure 2. Max. Non-Repetitive Peak Forward Surge Current

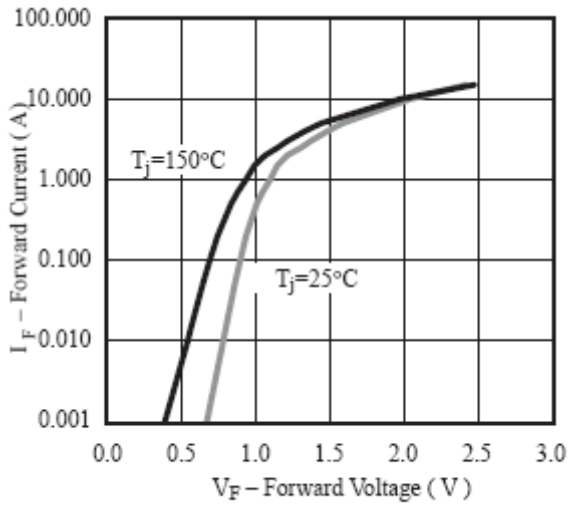


Figure 3. Forward Current

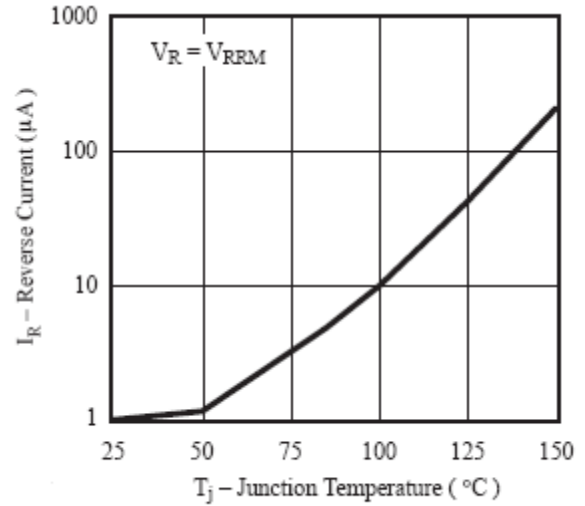


Figure 4. Reverse Current

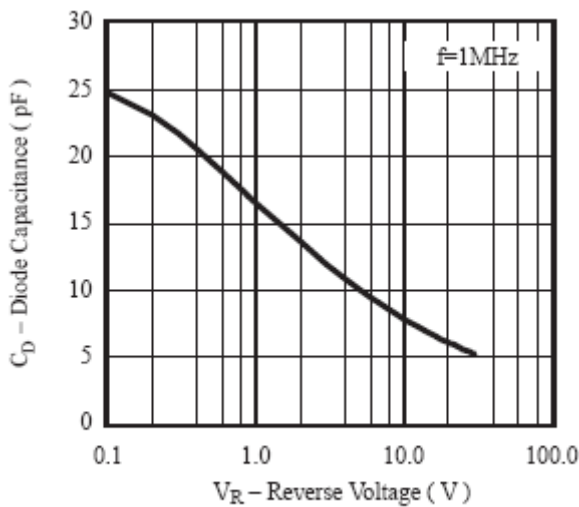


Figure 5. Diode Capacitance