

SBYG10DG THRU SBYG10MG

SURFACE MOUNT FAST SWITCHING RECTIFIER

VOLTAGE: 200V to 1000V

CURRENT: 1.5A



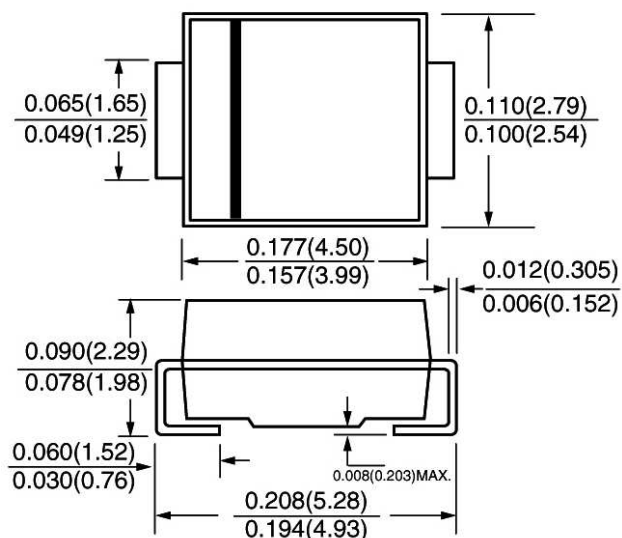
FEATURE

For surface mounted application
High surge current capability
Glass passivated chip
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: **G10D G10G G10J G10K G10M**

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°C, unless otherwise stated,
for capacitive load, derate current by 20%)

	Symbol	SBYG10 DG	SBYG10 GG	SBYG10 JG	SBYG10 KG	SBYG10 MG	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	200	400	600	800	1000	V
Maximum RMS Voltage	V _{rms}	140	280	420	560	700	V
Maximum DC blocking Voltage	V _{dc}	200	400	600	800	1000	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 T _a =25°C	V _f	1.15					V
Pulse energy in avalanche mode, non repetitive (inductive load switch off) at I _{BR} =1A	E _r	20					mJ
Maximum DC Reverse Current at rated DC blocking voltage T _a =25°C T _a =125°C	I _r	1.0 40.0					µA
Typical Thermal Resistance (Note 1) (Note 2)	R _{th(jl)} R _{th(ja)}	25 150					K/W
Operating and Storage Temperature Range	T _j , T _{stg}	-50 to +150					°C

Note:

1. T_L=const
2. mounted on epoxy-glass hard tissue

Rev.A2

www.gulfsemi.com

RATINGS AND CHARACTERISTIC CURVES SBYG10DG THRU SBYG10MG

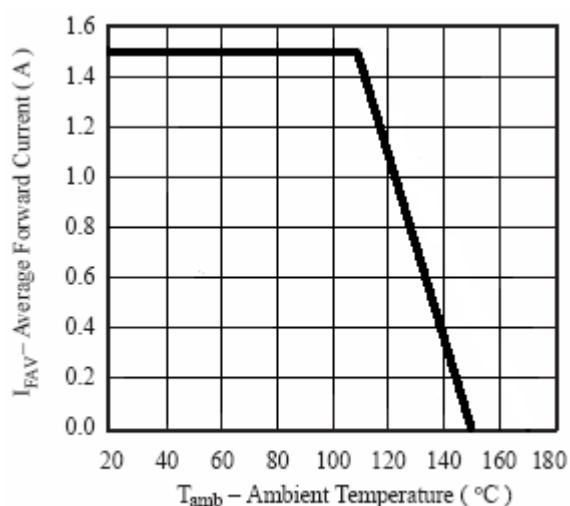


Figure 1. Max. Average Forward Current

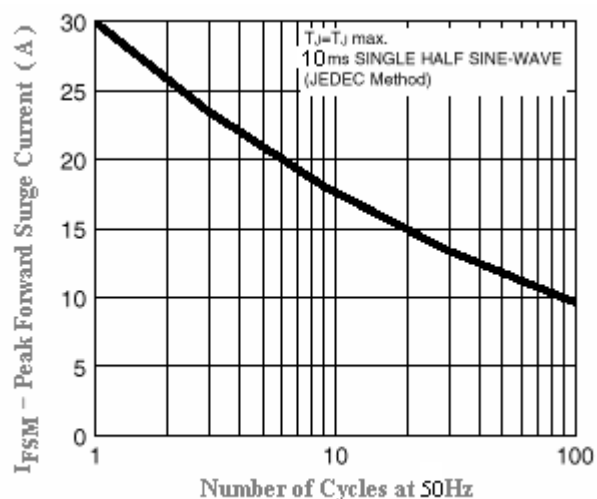


Figure 2. Max. Non-Repetitive Peak Forward Surge Current

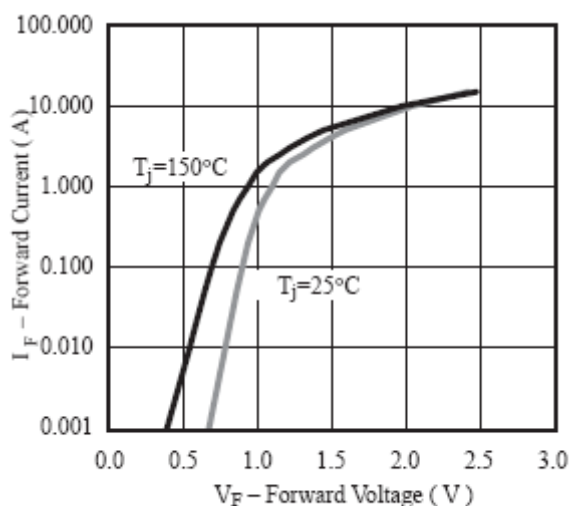


Figure 3. Forward Current

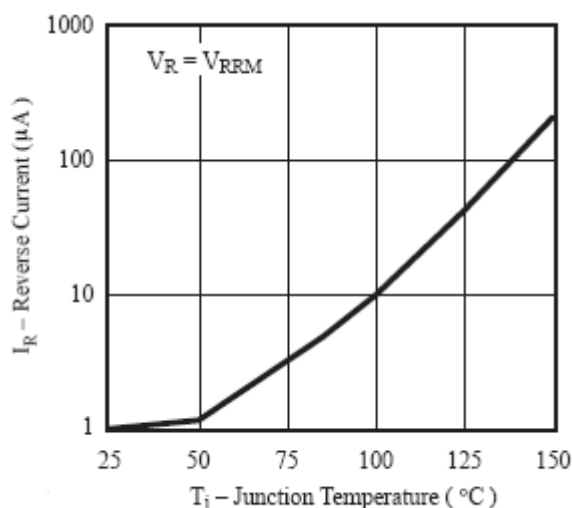


Figure 4. Reverse Current

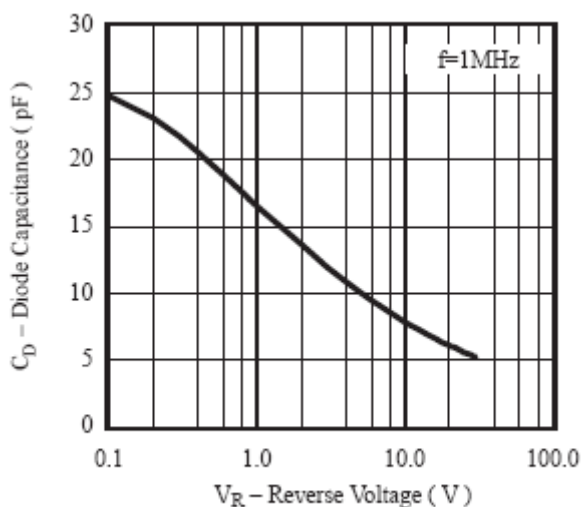


Figure 5. Diode Capacitance