SBYG21KG THRU SBYG21MG

SURFACE MOUNT FAST SWITCHING RECTIFIER

VOLTAGE：800 to 1000V **CURRENT：1.5A**

GULF SEMI

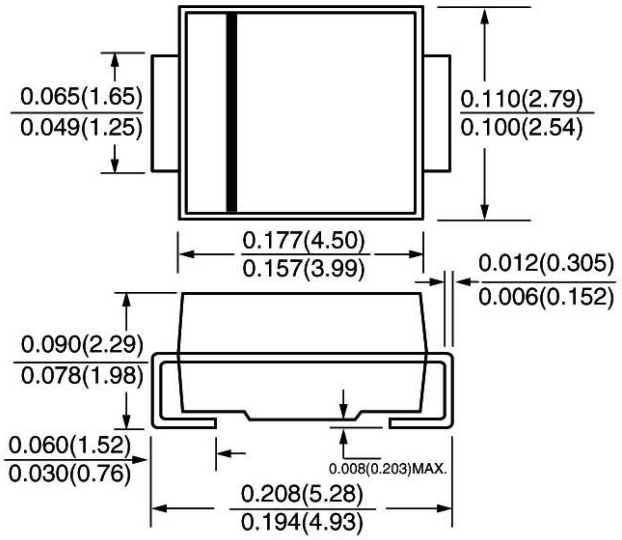
FEATURE

Ideal for surface mount pick and place application
Low profile package
Built-in strain relief
Low reverse current
Soft recovery characteristics
High temperature soldering guaranteed
260℃/10sec/at terminals
Glass passivated chip
Fast reverse recovery time

MECHANICAL DATA

Terminal：Plated axial leads solderable per MIL-STD 202E, method 208C
Case：Molded with UL-94 class V-0 recognized Flame Retardant 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, for capacitive load, date current by 20%)

	SYMBOL	SBYG21KG	SBYG21MG	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	800	1000	V
Maximum RMS Voltage	Vrms	560	700	V
Maximum DC blocking Voltage	Vdc	800	1000	V
Maximum Average Forward Rectified	If(av)	1.5		A
Peak Forward Surge Current 8.3ms single half sine- wave superimposed on rated load	Ifsm	50.0		A
Maximum Instantaneous Forward Voltage at rated forward current	Vf	1.6		V
Maximum DC Reverse Current Tj =25℃ at rated DC blocking voltage Tj =100℃	Ir	1.0 10.0		μA
Maximum Reverse Recovery Time (Note1)	Trr	120		nS
Pulse energy in avalanche mode, non repetitive(inductive load switch off) (Note 2)	Ersm	20		mJ
Typical Thermal Resistance (Note 3) (Note 4)	Rth(jl) Rth(ja)	25.0 150		K/W
Storage and Operating Junction Temperature	Tstg, Tj	-50 to +150		℃

Note：
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. I(BR)R=1.0A, Tj=25℃
3. TL=const.
3. Thermal Resistance from Junction to terminal mounted on epoxy-glass hard tissue

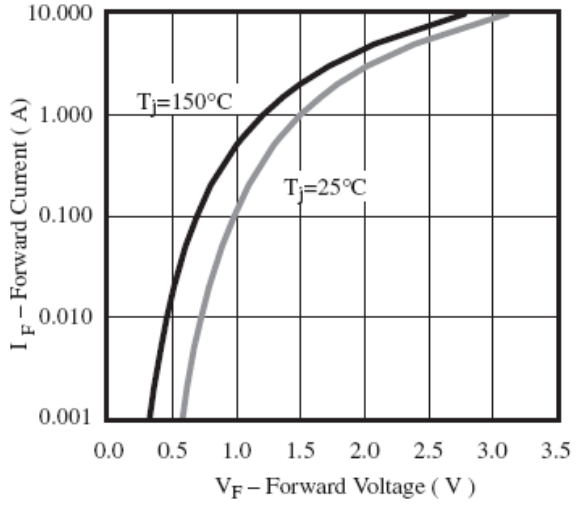


Figure 1. Forward Current vs. Forward Voltage

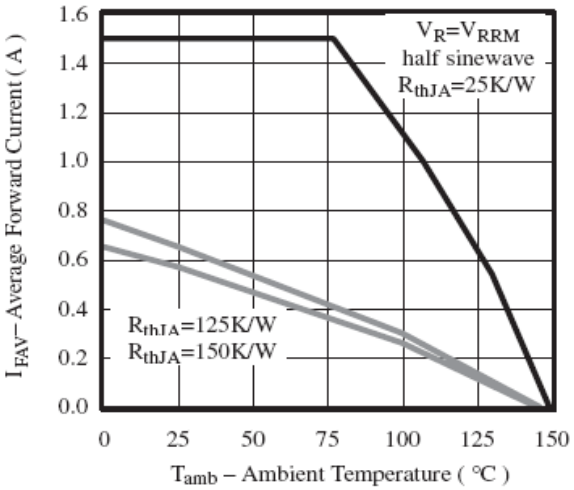


Figure 2. Max. Average Forward Current vs. Ambient Temperature

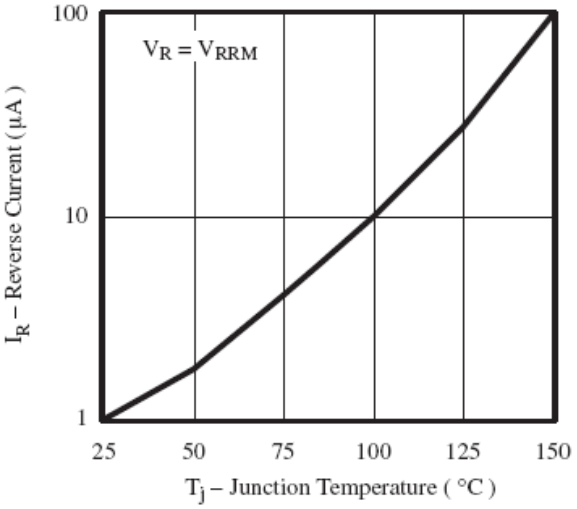


Figure 3. Reverse Current vs. Junction Temperature

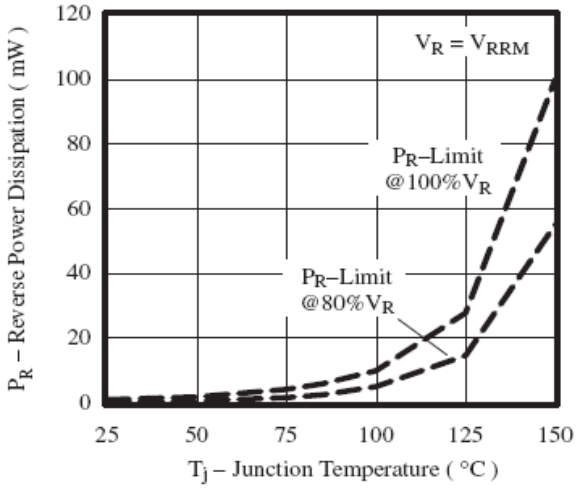


Figure 4. Max. Reverse Power Dissipation vs. Junction Temperature

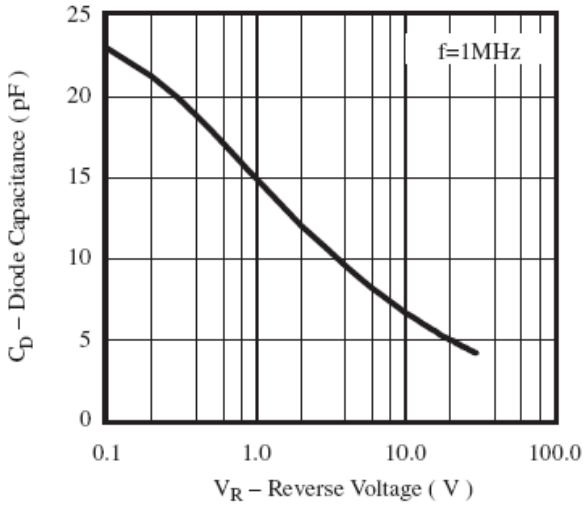


Figure 5. Diode Capacitance vs. Reverse Voltage

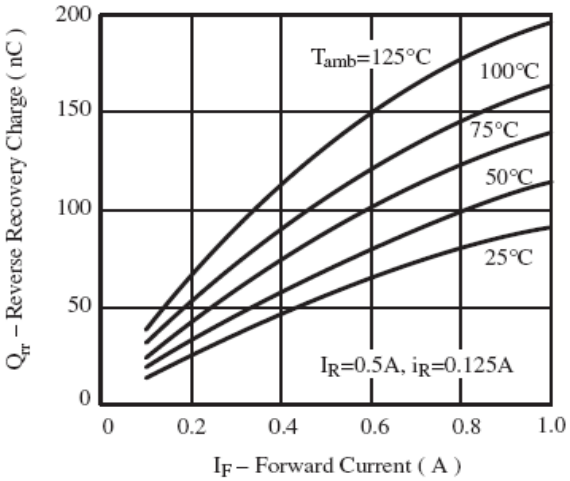


Figure 6. Max. Reverse Recovery Charge vs. Forward Current