BYG10Y

SINTERED GLASS JUNCTION
SURFACE MOUNTED RECTIFIER

VOLTAGE：1600 V **CURRENT： 1.5A**

GULF SEMI

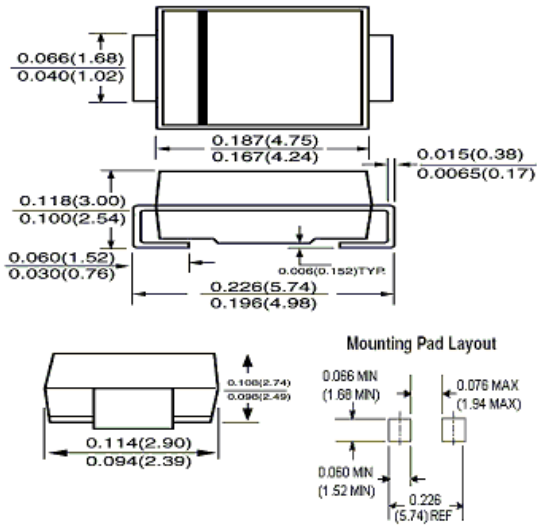
FEATURE

For surface mounted application
High temperature metallurgic ally bonded
Sintered glass junction
Capability of meeting environmental standard of MIL-S-19500
High temperature soldering guaranteed
450℃/10sec/at terminal / complete device
Submersible temperature of 265℃ for 10sec

MECHANICAL DATA

Terminal：Plated Terminal, solderable per MIL-STD 202, method 208C
Case：Molded with UL-94 class V-0 recognized Flame Retardant Epoxy over Glass
Polarity：color band denotes cathode end

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

	SYMBOL	BYG10Y	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	1600	V
Maximum RMS Voltage	Vrms	1120	V
Maximum DC blocking Voltage	Vdc	1600	V
Maximum Average Forward Rectified Current	If(av)	1.5	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	50.0	A
Maximum Forward Voltage at rated Forward current Ta =25℃	Vf	1.15	V
Maximum full load reverse current full cycle average at 75℃ ambient	Ir(av)	30.0	μA
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =125℃	Ir	5.0 50.0	μA
Typical Junction Capacitance (Note 1)	Cj	15.0	pF
Typical Thermal Resistance (Note 2)	Rth(ja)	80.0	℃/W
Operating and Storage Temperature Range	Tstg, Tj	-65 to +175	℃

Note：
1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient 6.0mm^2 copper pad to each terminal

RATINGS AND CHARACTERISTIC CURVES BYG10Y

FIG. 1 - FORWARD CURRENT DERATING CURVE

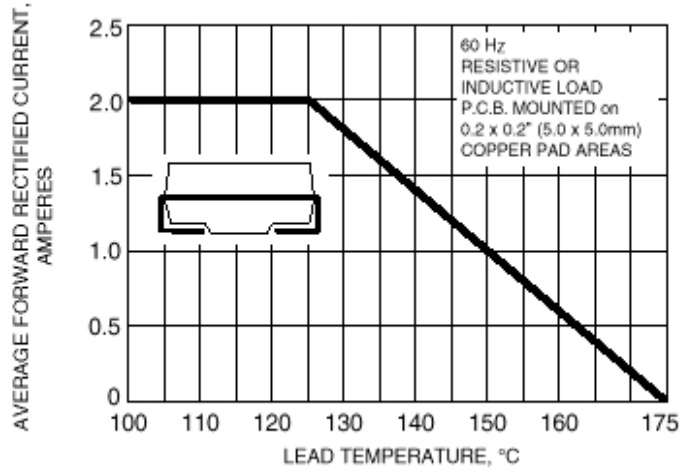


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

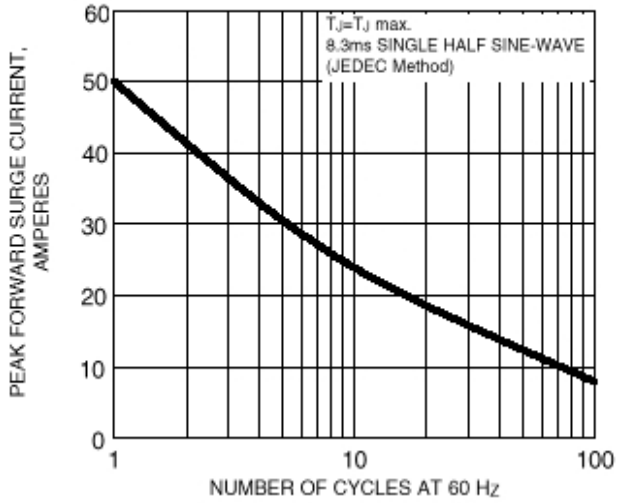


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

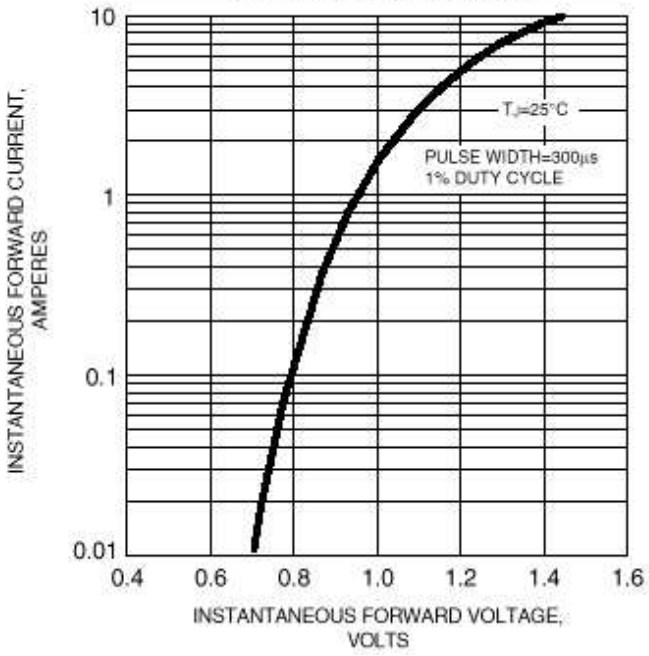


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

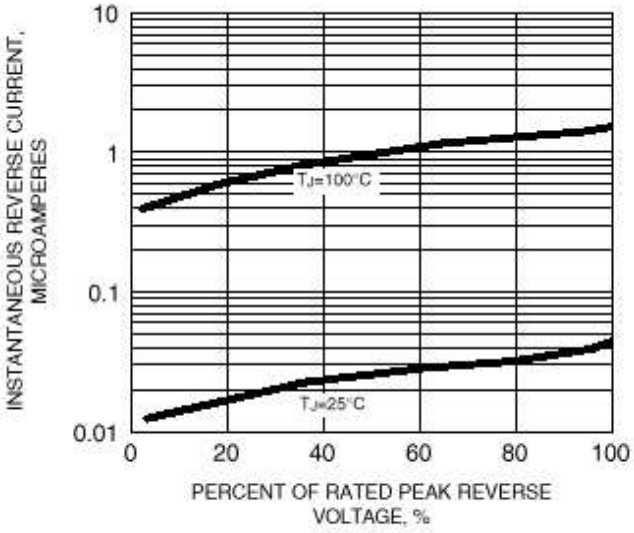


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

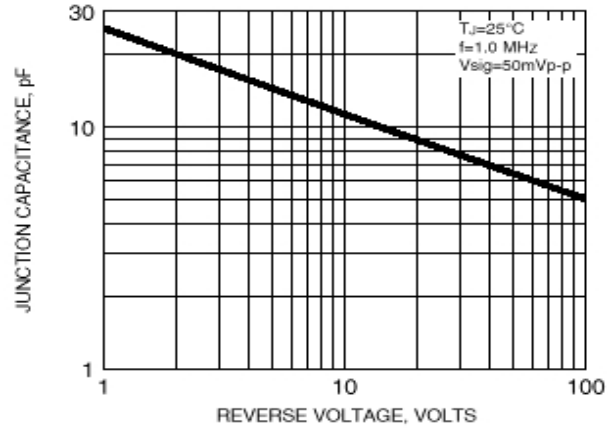


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE