

BYG10Y

SINTERED GLASS JUNCTION SURFACE MOUNTED RECTIFIER

VOLTAGE: 1600 V

CURRENT: 1.5A



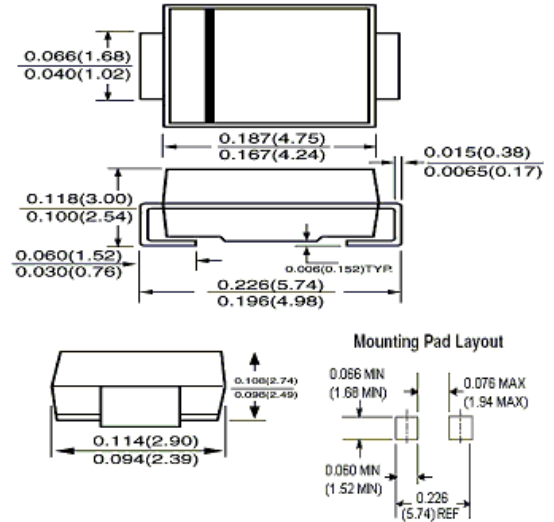
FEATURE

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°C/10sec/at terminal / complete device
Submersible temperature of 265°C 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°C, unless otherwise stated, for capacitive load, derate current by 20%)

	SYMBOL	BYG10Y	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	1600	V
Maximum RMS Voltage	V _{rms}	1120	V
Maximum DC blocking Voltage	V _{dc}	1600	V
Maximum Average Forward Rectified Current	I _{f(av)}	1.5	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	50.0	A
Maximum Forward Voltage at rated Forward current T _a =25°C	V _f	1.15	V
Maximum full load reverse current full cycle average at 75°C ambient	I _{r(av)}	30.0	µA
Maximum DC Reverse Current at rated DC blocking voltage T _a =25°C T _a =125°C	I _r	5.0 50.0	µA
Typical Junction Capacitance (Note 1)	C _j	15.0	pF
Typical Thermal Resistance (Note 2)	R _{th(ja)}	80.0	°C/W
Operating and Storage Temperature Range	T _{stg} , T _j	-65 to +175	°C

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient 6.0mm² copper pad to each terminal

RATINGS AND CHARACTERISTIC CURVES BYG10Y

FIG. 1 - FORWARD CURRENT DERATING CURVE

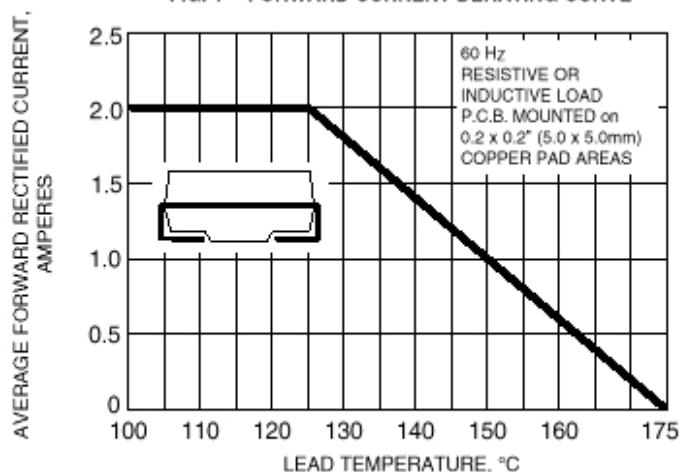


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

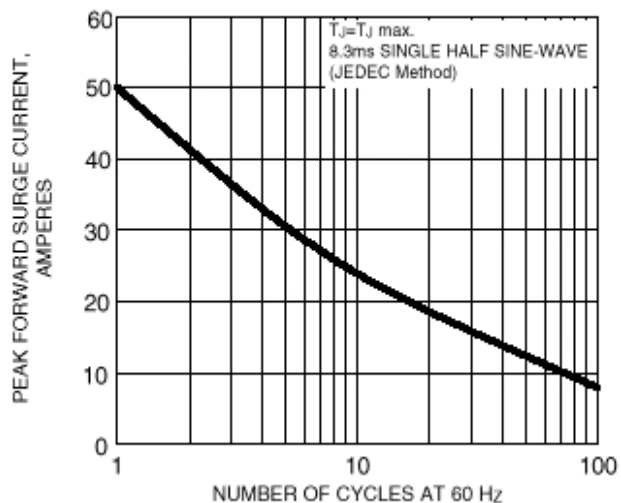


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

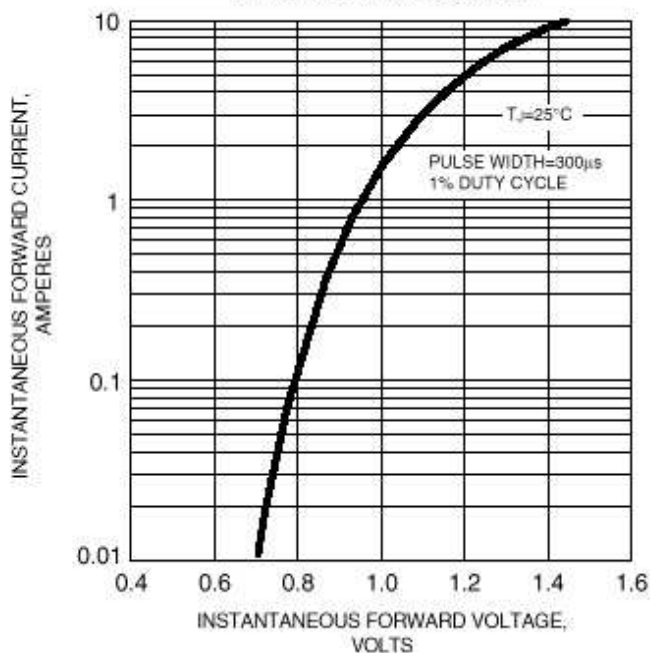


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

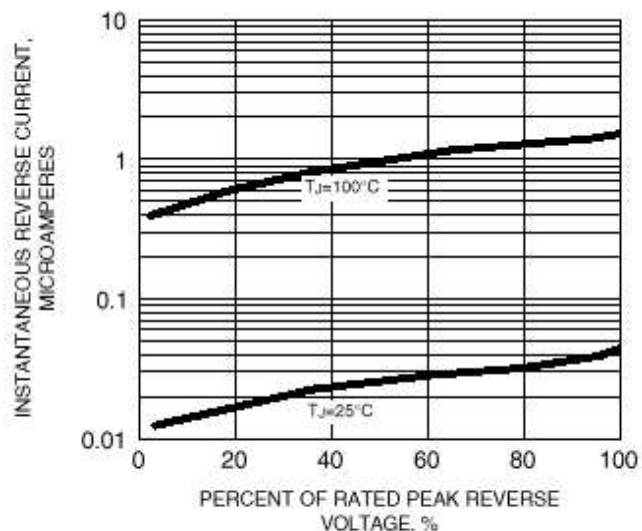


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

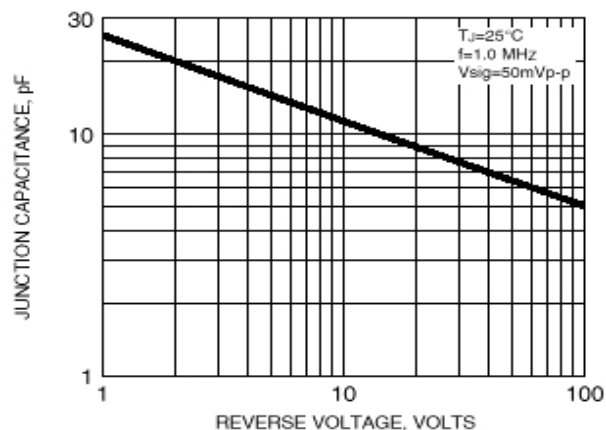


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

