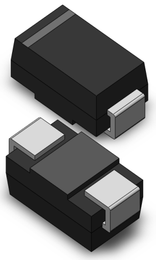
BYG10Y

SINTERED GLASS JUNCTION SURFACE MOUNTED RECTIIER DIODES



VOLTAGE RANGE: 1600V
CURRENT: 1.5 A

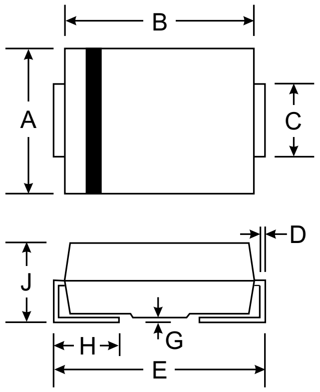
Features

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

Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable
  per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)

RoHS COMPLIANT



SMA(DO-214AC)		
Dim	**Min**	**Max**
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics

T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic		**Symbol**	BYG10Y	**Unit**
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 at rated DC blocking voltage	Ta =25℃ 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

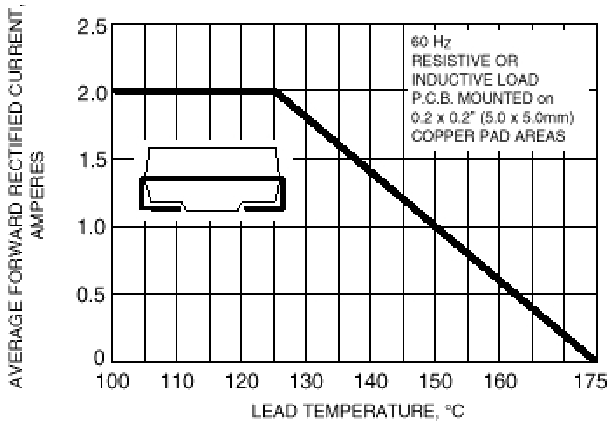


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

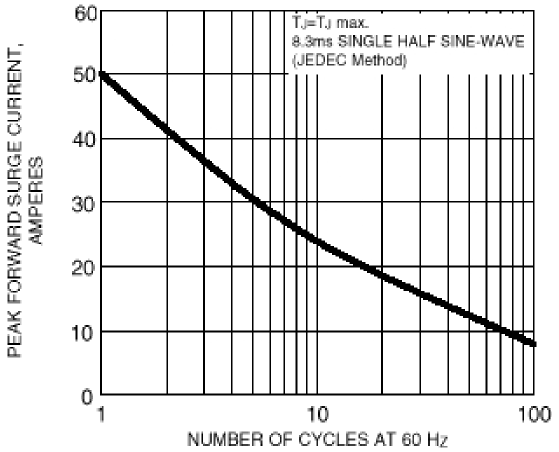


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

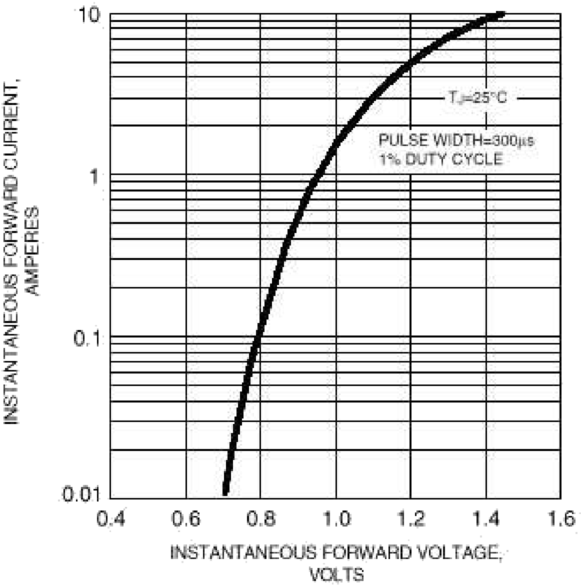


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

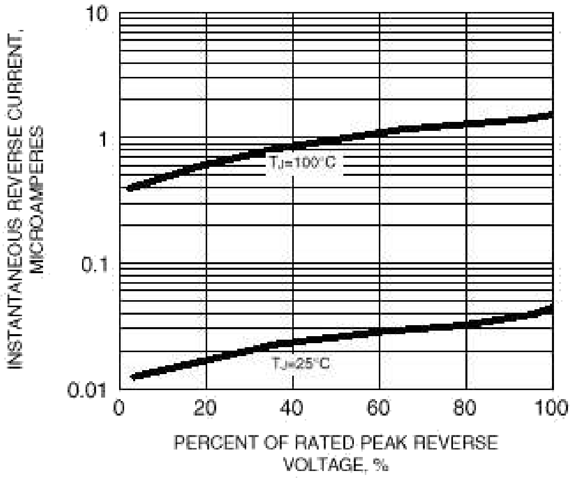


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

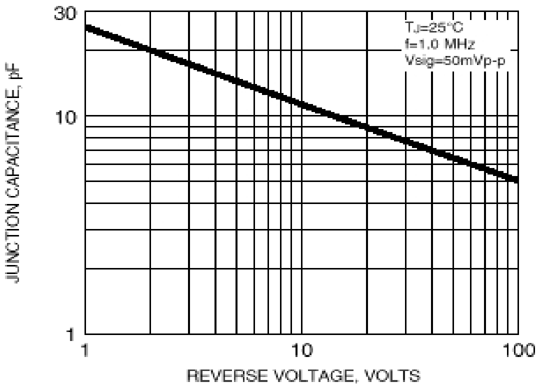


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE