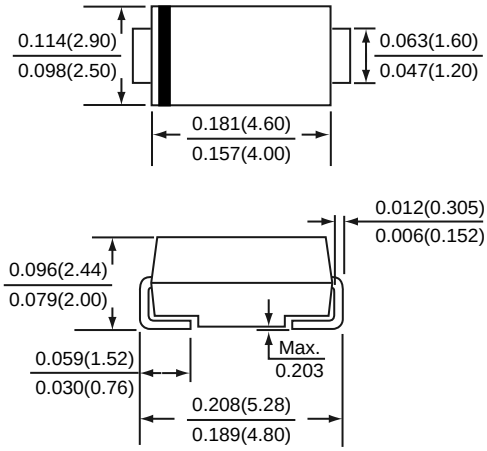
GF02-20

HIGH VOLTAGE SINTERED GLASS PASSIVATED JUNCTION RECTIFIER

Reverse Voltage - 2000 Volts Forward Current - 1.0 Ampere

PATENTED

SMA/DO-214AC



*Dimensions in inches and (millimeters)

SUPEREX II™

FEATURES

* GPRC (Glass Passivated Rectifier Chip) inside
* Glass passivated cavity-free junction
* High temperature soldering guaranteed: 260°C/10 seconds, at terminals
* Plastic package has Underwriters Laboratory Flammability Classification 94V-0

MECHANICAL DATA

Case : JEDEC DO-214AC molded plastic over glass body
Terminals : Tin Plated, solderable per MIL-STD-750, Method 2026
Polarity : Color band denotes cathode end
Weight : 0.002 ounes , 0.064 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	*SYMBOLS*	***GF02-20***	*UNITS*
Maximum repetitive peak reverse voltage	V_{RRM}	***2000***	Volts
Maximum RMS voltage	V_{RMS}	***1400***	Volts
Maximum DC blocking voltage	V_{DC}	***2000***	Volts
Maximum average forward rectified current (SEE FIG.1)	$I_{(AV)}$	1.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30	Amps
Maximum instantaneous forward voltage at 1.0 A	V_F	2.00	Volts
Maximum DC reverse current at rated DC blocking voltage	I_R	T_A=25°C: 5 T_A=125°C: 50	uA
Typical junction capacitance (NOTE 1)	C_J	12	pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$ $R_{\theta JL}$	75 27	°C / W
Operating junction and storage temperature range	T_J,T_{STG}	-65 to +175	°C

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
(2) Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES OF GF02-20

FIG.1 - FORWARD CURRENT DERATING CURVE

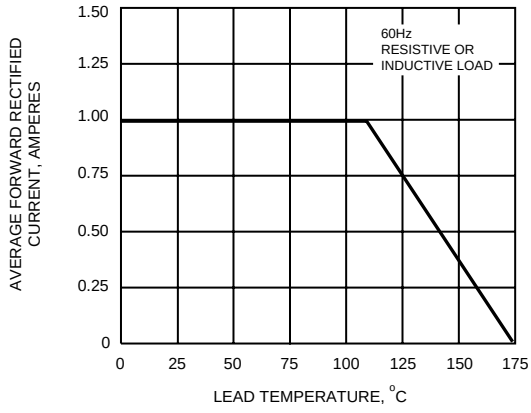


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

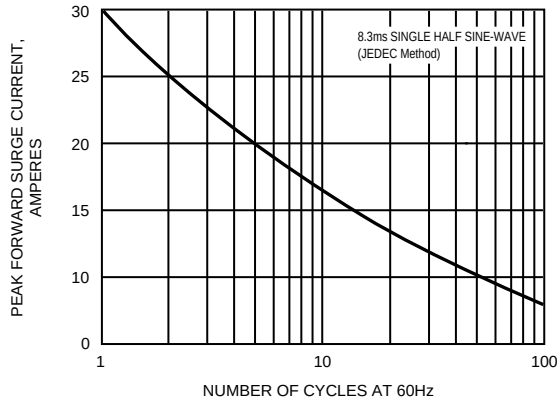


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

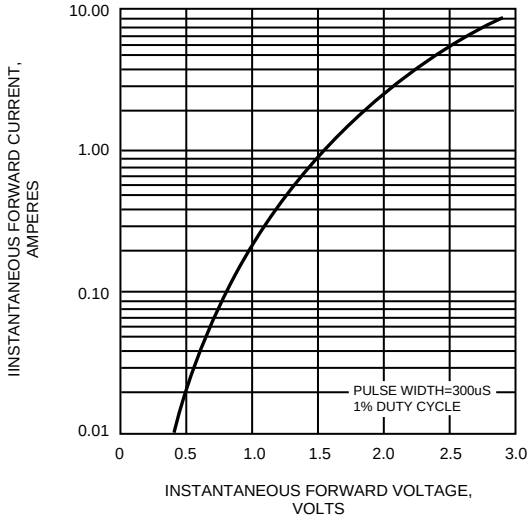


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

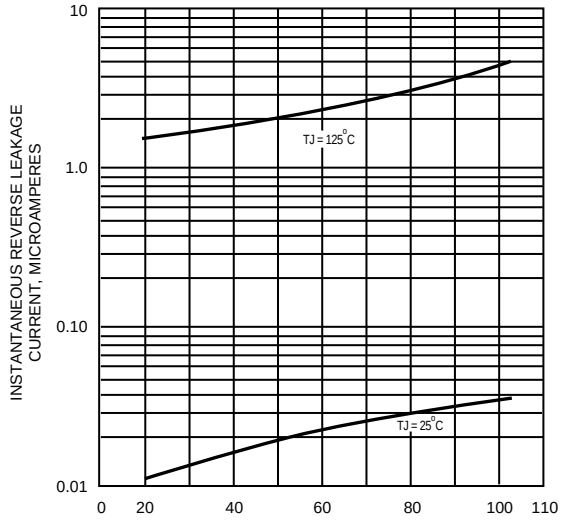


FIG.5 - TYPICAL JUNCTION CAPACITANCE

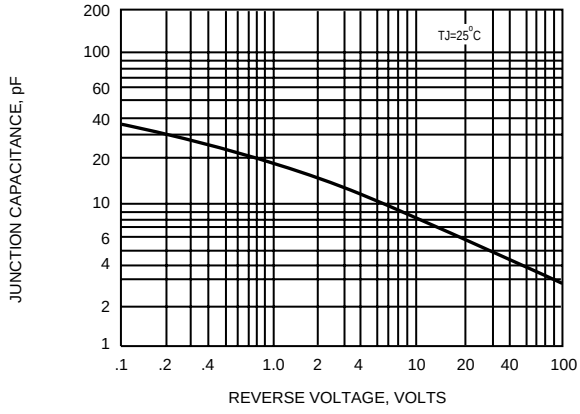


FIG.6 - TYPICAL TRANSIENT THERMAL IMPEDANCE