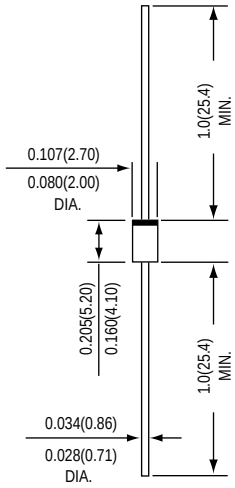
GP10-30

HIGH VOLTAGE SINTERED GLASS PASSIVATED JUNCTION RECTIFIER

Reverse Voltage - 3000 Volts Forward Current - 1.0 Ampere

PATENTED

DO-204AL



*Dimensions in inches and (millimeters)

SUPEREX II™

FEATURES

* GPRC (Glass Passivated Rectifier Chip) inside
* Glass passivated cavity-free junction
* Capable of meeting environmental standards of MIL-S-19500
* 1.0 Ampere operation at T_A=75°C and 55°C with no thermal runaway
* High temperature soldering guaranteed: 260°C/10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3 kg) tension
* Plastic package has Underwriters Laboratory Flammability Classification 94V-0

MECHANICAL DATA

Case : JEDEC DO-204AL molded plastic over glass body
Terminals : Tin Plated, solderable per MIL-STD-750, Method 2026
Polarity : Color band denotes cathode end
Weight : 0.012 ounce, 0.3 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.	*SYMBOLS*	***GP10-30***	*UNITS*
Maximum repetitive peak reverse voltage	V_{RRM}	***3000***	Volts
Maximum RMS voltage	V_{RMS}	***2100***	Volts
Maximum DC blocking voltage	V_{DC}	***3000***	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length (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}	20	Amps
Maximum instantaneous forward voltage at 1.0 A	V_F	1.5	Volts
Maximum DC reverse current at rated DC blocking voltage T_A=25℃	I_R	5	uA
Typical thermal resistance (NOTE 1)	$R_{\theta JA}$	130	℃ / W
Operating junction and storage temperature range	T_J,T_{STG}	-65 to +175	℃

NOTES : (1) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead lengths, P.C.B. mounted.
(2) Preliminary draft.

RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

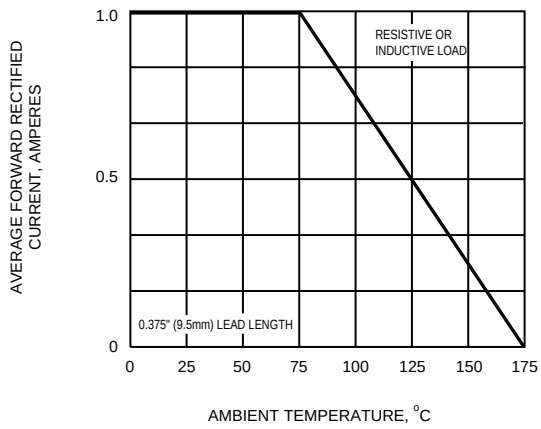


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

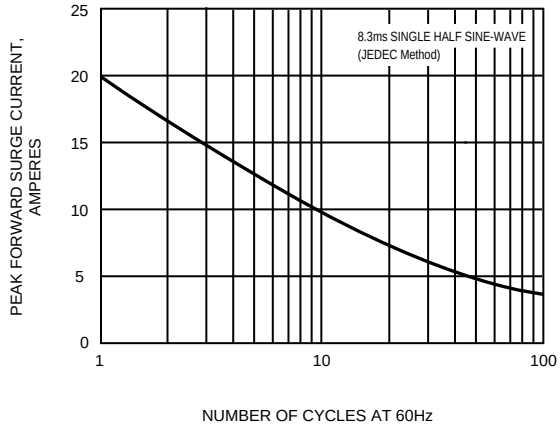


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

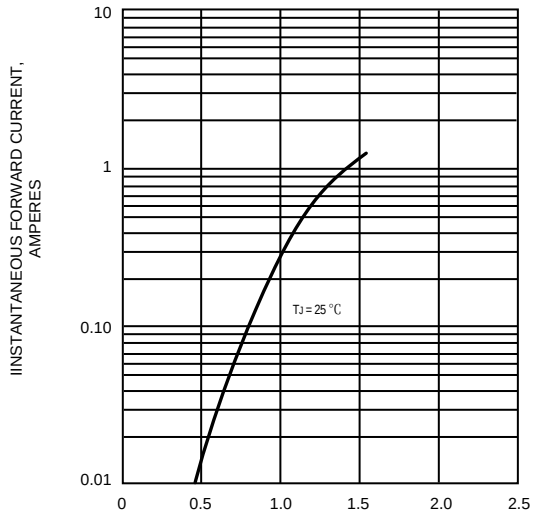


FIG.4 - TYPICAL REVERSE CHARACTERISTICS