



EGP50D THRU EGP50G

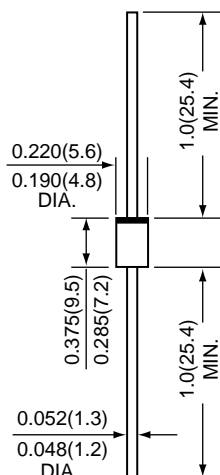
SINTERED GLASS PASSIVATED JUNCTION HIGH EFFICIENT RECTIFIER

Reverse Voltage - 50 to 400 Volts

Forward Current - 5.0 Amperes

PATENTED

DO-201AD



*Dimensions in inches and (millimeters)

SUPEREX II™



FEATURES

- * GPRC (Glass Passivated Rectifier Chip) inside
- * Glass passivated cavity-free junction
- * Superfast recovery time for high efficiency
- * Low forward voltage, high current capability
- * Low leakage current
- * High surge current capability
- * 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 : Molded plastic over glass body

Terminals : Tin Plated, solderable per MIL-STD-750, Method 2026

Polarity : Color band denotes cathode end

Weight : 0.04 ounces , 1.12 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

<i>Ratings at 25 °C ambient temperature unless otherwise specified.</i>	SYMBOLS	<i>EGP50D</i>	<i>EGP50G</i>	UNITS
Maximum repetitive peak reverse voltage	VRRM	200	400	Volts
Maximum RMS voltage	VRMS	140	280	Volts
Maximum DC blocking voltage	VDC	200	400	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length (SEE FIG.1)	I (AV)	5.0		Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	150		Amps
Maximum instantaneous forward voltage at 5.0 A	VF	1.25		Volts
Maximum DC reverse current at rated DC blocking voltage	IR	5 50		uA
Maximum reverse recovery time (NOTE 1)	trr	50		nS
Typical thermal resistance (NOTE 2)	R θJA	20		°C / W
	R θJL	5		
Operating junction and storage temperature range	TJ,TSTG	-65 to +175		°C

NOTES : (1) Reverse recovery test condition : IF 0.5A, IR=1.0A, Irr=0.25A

(2) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead lengths, P.C.B. mounted.

RATINGS AND CHARACTERISTIC CURVES EGP50D THRU EGP50G

FIG.1 - FORWARD CURRENT DERATING CURVE

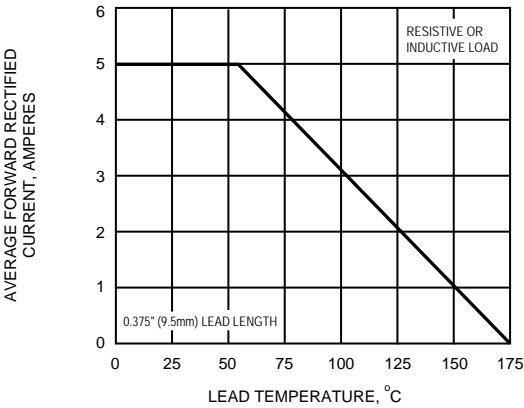


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

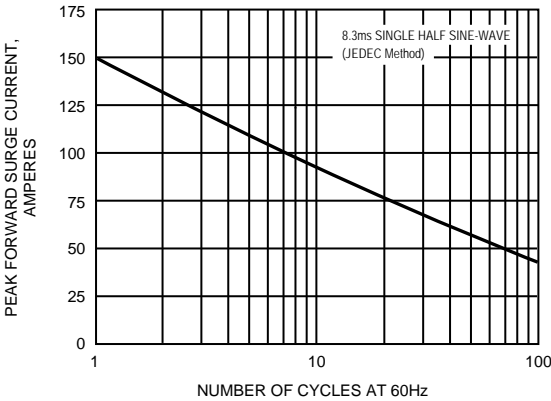


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

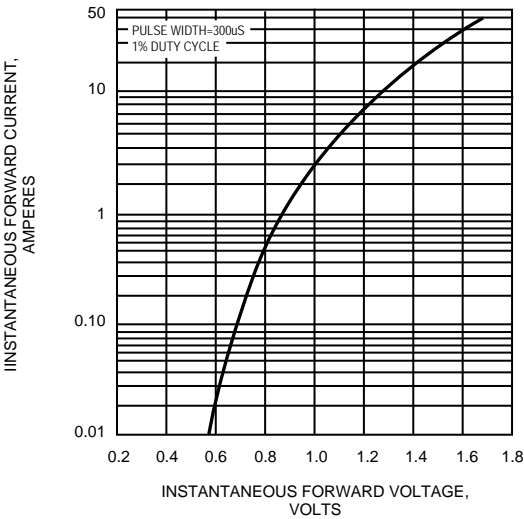


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

