



# EGP100D

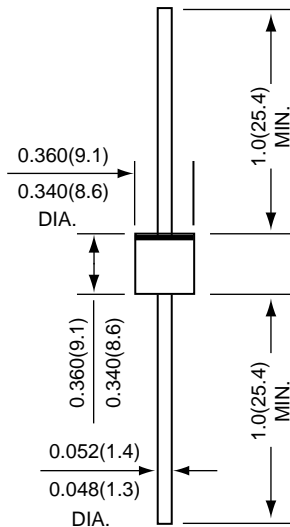
## SINTERED GLASS PASSIVATED JUNCTION HIGH EFFICIENT RECTIFIER

Reverse Voltage - 200 Volts

Forward Current - 10 Amperes

**PATENTED**

P-600



\*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** : JEDEC DO-201AD molded plastic over glass body

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

**Polarity** : Color band denotes cathode end

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	SYMBOLS	EGP100D	UNITS
Maximum repetitive peak reverse voltage	VRRM	200	Volts
Maximum RMS voltage	VRMS	140	Volts
Maximum DC blocking voltage	VDC	200	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length (SEE FIG.1)	I(AV)	10	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	250	Amps
Maximum instantaneous forward voltage at 10 A	VF	0.95	Volts
Maximum DC reverse current @TA=25°C at rated DC blocking voltage @TA=85°C @TA=150°C	IR	3.0 10 50	uA
Maximum reverse recovery time (NOTE)	trr	60	nS
Typical junction capacitance (NOTE 2)	CJ	180	pF
Typical thermal resistance (NOTE 3)	R JA R JL	25 10	°C / W
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) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

(3) 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 OF EGP100D

FIG.1 - FORWARD CURRENT DERATING CURVE

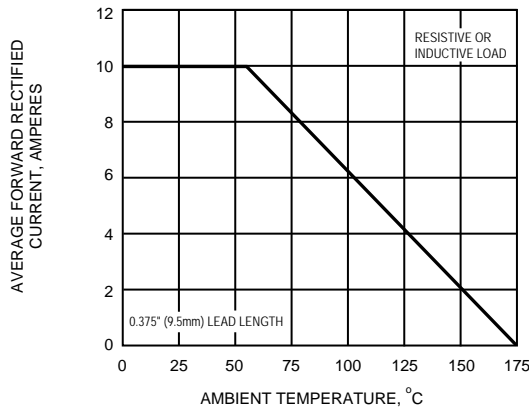


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

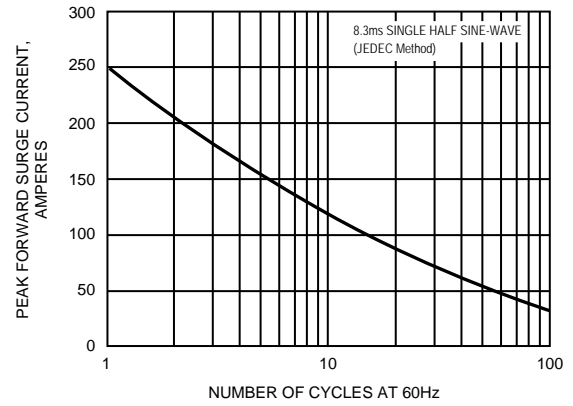


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

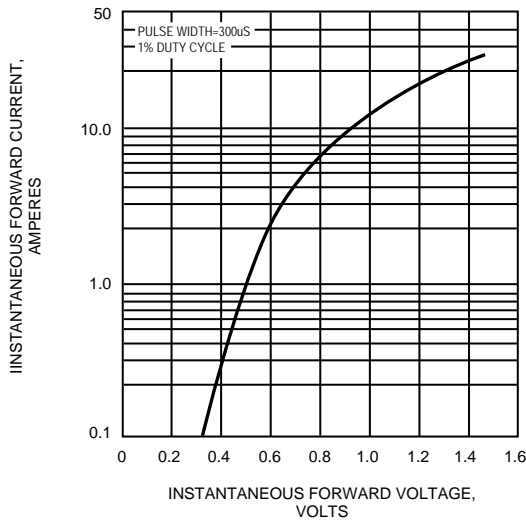


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

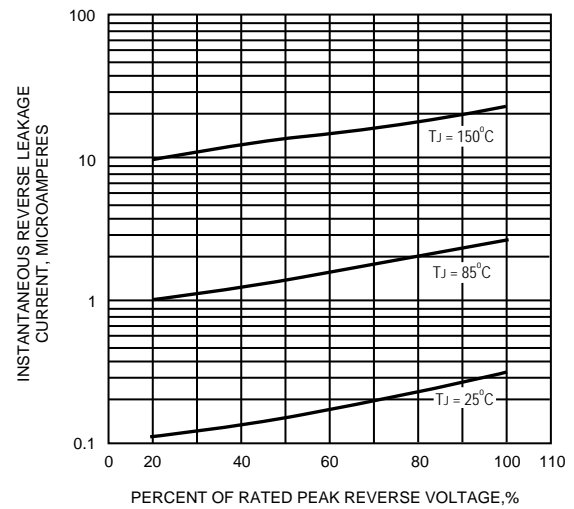


FIG.5 - TYPICAL JUNCTION CAPACITANCE

