

EGP50A THRU EGP50G

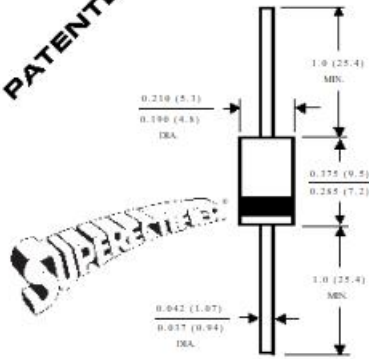
GLASS PASSIVATED FAST EFFICIENT RECTIFIER

Reverse Voltage - 50 to 400 Volts

Forward Current - 5.0 Amperes

PATENTED *

Case Style GP20



Dimensions in inches and (millimeters)

* Glass-plastic encapsulation technique is covered by

Patent No. 3,996,602, brazed-lead assembly by Patent No. 3,930,306

FEATURES

- ◆ Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- ◆ 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 metallurgically bonded construction
- ◆ High temperature soldering guaranteed: 300°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: Molded plastic over solid glass body
 Terminals: Axial leads, solderable per MIL-STD-750, Method 2026
 Polarity: Color band denotes cathode end
 Mounting Position: Any
 Weight: 0.03 ounce, 0.8 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	EGP 50A	EGP 50B	EGP 50C	EGP 50D	EGP 50F	EGP 50G	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	150	200	300	400	Volts
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	Volts
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_1=55^\circ\text{C}$	I_{AV}	5.0						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150.0						Amps
Maximum instantaneous forward voltage at 5.0A	V_F	0.95				1.25		Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	I_R	5.0				50.0		μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	50.0						ns
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$ $R_{\theta JL}$	20.0				5.0		$^\circ\text{C/W}$
Typical junction capacitance (NOTE 3)	C_j	95				75		pF
Operating junction and storage temperature range	T_A, T_{STG}	-65 to +150						$^\circ\text{C}$

NOTES:

- (1) Reverse recovery test conditions: $I_F=0.5A, I_R=1.0A, I_R=0.25A$
- (2) Thermal resistance from junction to ambient and from junction of lead at 0.375" (9.5mm) lead length, both leads measured attached to heat sinks
- (3) Measured at 1.0 MHz and applied reverse voltage of 40 Volts.

RATINGS AND CHARACTERISTIC CURVES EGP50A THRU EGP50G

