

# Silicon Diode

## **EGP10D**

Fast Efficient Rectifier

200V / 1A

# DATASHEET

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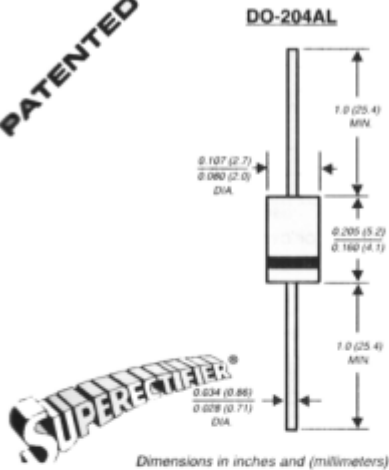
OEM – General Semiconductor

Source: General Semiconductor Databook 1998

# EGP10A THRU EGP10G

**GLASS PASSIVATED FAST EFFICIENT RECTIFIER**  
 Reverse Voltage - 50 to 400 Volts    Forward Current - 1.0 Ampere

**PATENTED\***



Dimensions in inches and (millimeters)

\* Glass Encapsulation technique is covered by Patent No. 3,996,602, brazed lead assembly to 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:** JEDEC DO-204AL molded plastic over glass body  
**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.012 ounce, 0.3 gram

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	EGP 10A	EGP 10B	EGP 10C	EGP 10D	EGP 10F	EGP 10G	UNITS
Maximum repetitive peak reverse voltage	VRRM	50	100	150	200	300	400	Volts
Maximum RMS voltage	VRMS	35	70	105	140	210	280	Volts
Maximum DC blocking voltage	VDC	50	100	150	200	300	400	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at TA=55°C	IF(AV)	1.0						Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	IFSM	30.0						Amps
Maximum instantaneous forward voltage at 1.0A	VF	0.95				1.25		Volts
Maximum DC reverse current at rated DC blocking voltage TA=25°C TA=125°C	IR	5.0 100						µA
Maximum reverse recovery time (NOTE 1)	trr	50.0						ns
Typical junction capacitance (NOTE 2)	CJ	22.0				15.0		pF
Typical thermal resistance (NOTE 3)	REJA	50.0						°C/W
Operating junction and storage temperature range	TJ, TSTG	-65 to +150						°C

**NOTES:**  
 (1) Reverse recovery test conditions: I<sub>r</sub>=0.5A, I<sub>f</sub>=1.0A, I<sub>r</sub>=0.25A  
 (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts  
 (3) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

**RATINGS AND CHARACTERISTICS CURVES EGP10A THRU EGP10G**

