

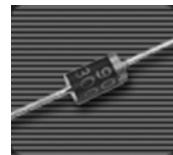


EGP30A thru EGP30G

Glass Passivated Junction Fast Efficient Rectifiers
Reverse Voltage 50 to 400 Volts Forward Current 3.0 Amperes

Features

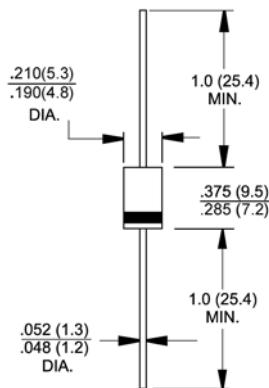
- ◆ Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- ◆ Cavity-free glass passivated junction
- ◆ Ultrafast recovery time for high efficiency
- ◆ Low forward voltage, high current capability
- ◆ Low leakage current
- ◆ High surge current capability
- ◆ High temperature metallurgically bonded construction
- ◆ High temperature soldering guaranteed:
300°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension



DO-201AD

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: 0.04 ounce, 1.1 grams



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	EGP 30A	EGP 30B	EGP 30C	EGP 30D	EGP 30F	EGP 30G	Unit
Maximum repetitive 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 $T_A=55^\circ\text{C}$	$I_{F(AV)}$				3.0			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}				125.0			Amps
Maximum instantaneous forward voltage at 3.0A	V_F		0.95			1.25		Volts
Maximum DC reverse current @ $T_A=25^\circ\text{C}$ @ $T_A=125^\circ\text{C}$	I_R			5.0	100			uA
Maximum reverse recovery time at $I_R=0.5\text{A}$, $I_F=1.0\text{A}$, $I_{FR}=0.25\text{A}$	t_{rr}			50				nS
Typical junction capacitance at 4.0V, 1MHz	C_J		85.0			75.0		pF
Typical thermal resistance (Note 1)	R_{JA} R_{BL}			20.0	8.0			°C/W
Operating junction and storage temperature range	T_J , T_{STG}			-55 to +150				°C

Notes: 1. Thermal resistance from junction to ambient, and from junction to lead at 0.375" (9.5mm) lead length, P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES

($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig. 1 – Maximum Forward Current Derating Curve

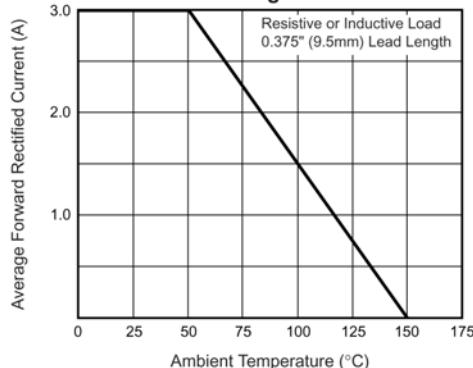


Fig. 3 – Typical Instantaneous Forward Characteristics

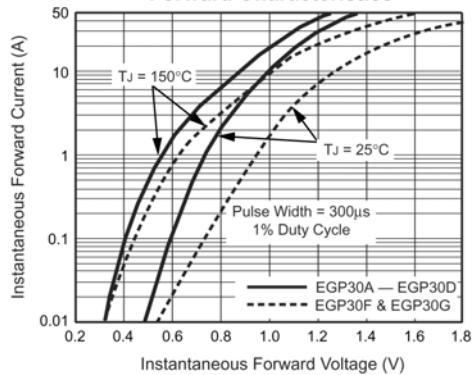


Fig. 5 – Typical Junction Capacitance

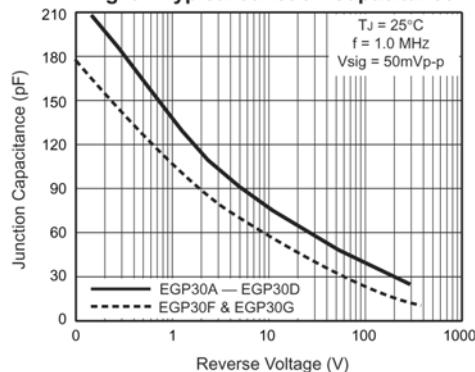


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

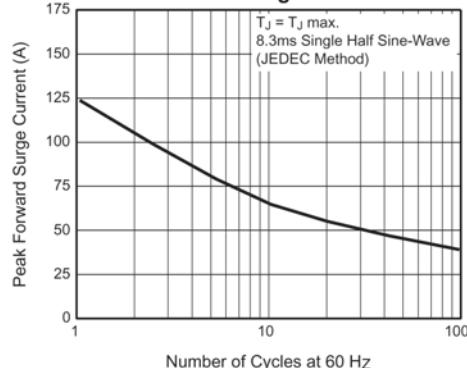


Fig. 4 – Typical Reverse Leakage Characteristics

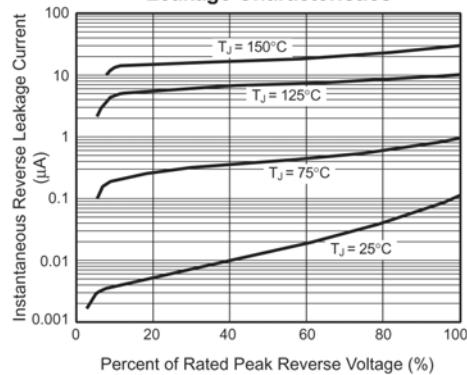


Fig. 6 – Typical Transient Thermal Impedance

