



EGP20A thru EGP20G

Glass Passivated Junction Fast Efficient Rectifiers
Reverse Voltage 50 to 400 Volts Forward Current 2.0 Amperes

Features

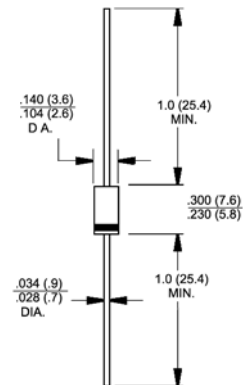
- ◆ Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- ◆ Cavity-free glass passivated junction
- ◆ Ultrafast recovery time for high efficiency
- ◆ Low forward voltage, high current capability
- ◆ Low leakage current
- ◆ High surge current capability
- ◆ High temperature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



DO-204AC (DO-15)

Mechanical Data

- ◆ Case: JEDEC DO-204AC, molded plastic over solid glass body
- ◆ Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- ◆ Polarity: Color band denotes cathode end
- ◆ Mounting Position: Any
- ◆ Weight : 0.014 ounce, 0.395 gram



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	EGP 20A	EGP 20B	EGP 20C	EGP 20D	EGP 20F	EGP 20G	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 $T_A=55^\circ\text{C}$	$I_{F(AV)}$	2.0						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	75.0						Amps
Maximum instantaneous forward voltage at 2.0A	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	5.0 100						μA
Maximum reverse recovery time at $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_S=0.25\text{A}$	t_{rr}	50						nS
Typical junction capacitance at 4.0V, 1MHz	C_J	70.0				45.0		pF
Typical thermal resistance (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	40.0 15.0						$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150						$^\circ\text{C}$

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

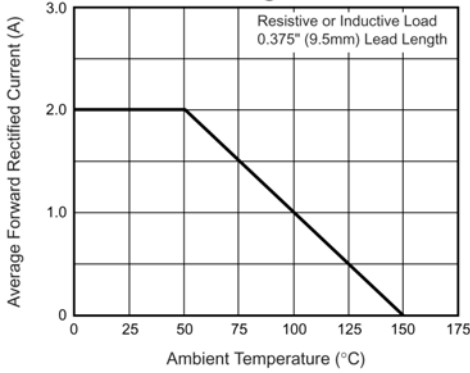


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

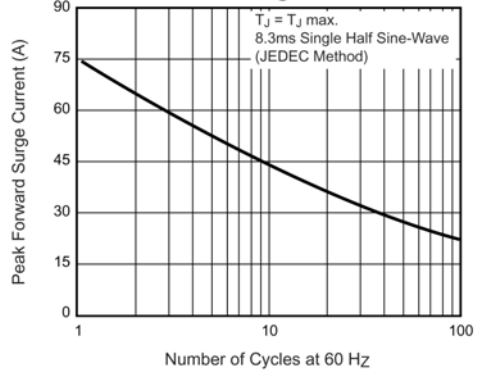


Fig. 3 – Typical Instantaneous Forward Characteristics

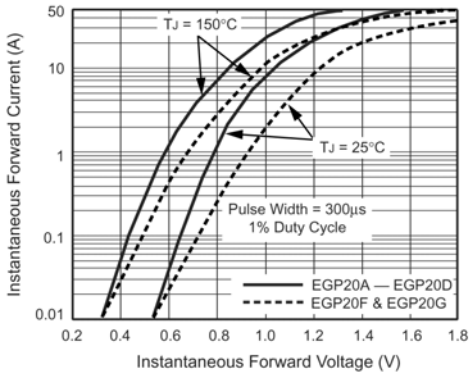


Fig. 4 – Typical Reverse Characteristics

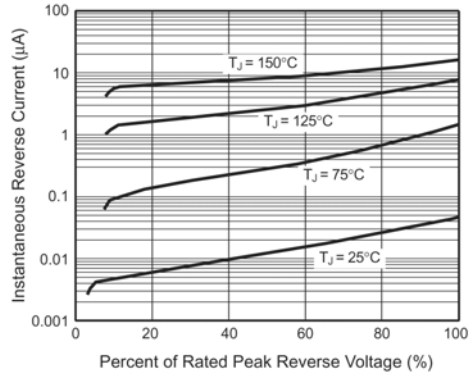


Fig. 5 – Typical Junction Capacitance

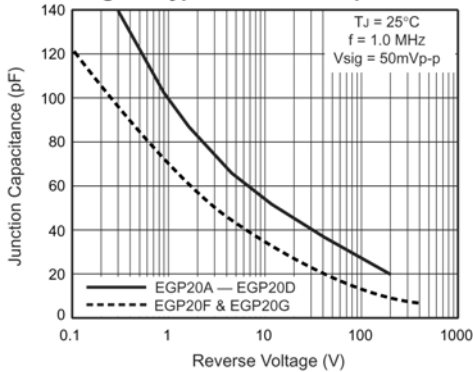


Fig. 6 – Typical Transient Thermal Impedance

