

EGP20A THRU EGP20G

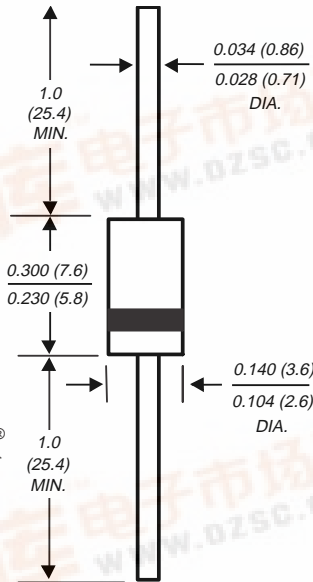
GLASS PASSIVATED FAST EFFICIENT RECTIFIER

Reverse Voltage - 50 to 400 Volts Forward Current - 2.0 Amperes

PATENTED*

SUPERRECTIFIER®

DO-204AC



Dimensions in inches and (millimeters)

* Glass-plastic encapsulation technique is covered by Patent No. 3,996,602 and 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:** 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:** 0.015 ounce, 0.4 gram

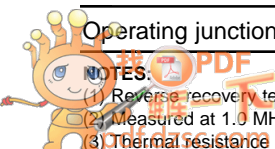
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	EGP 20A	EGP 20B	EGP 20C	EGP 20D	EGP 20F	EGP 20G	UNITS	
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°C	I _(AV)	2.0							Amps
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	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°C T _A =125°C	I _R	5.0 100.0							µA
Maximum reverse recovery time (NOTE 1)	t _{rr}	50.0							ns
Typical junction capacitance (NOTE 2)	C _J	70.0				45.0		pF	
Typical thermal resistance (NOTE 3)	R _{θJA} R _{θJL}	40.0 15.0							°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +150							°C

NOTES:

- (1) Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=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 length, P.C.B. mounted



RATINGS AND CHARACTERISTIC CURVES EGP20A THRU EGP20G

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE

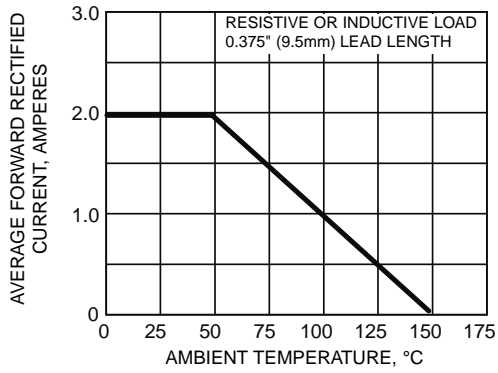


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

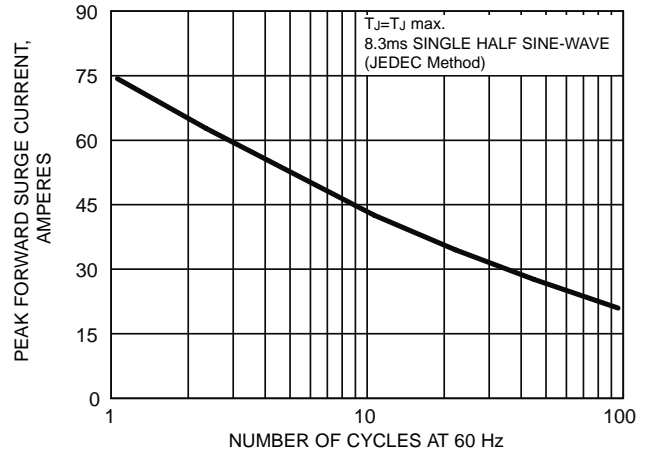


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

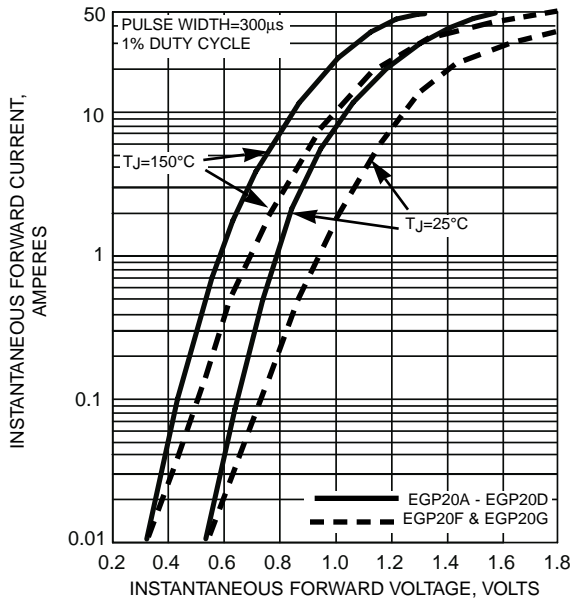


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

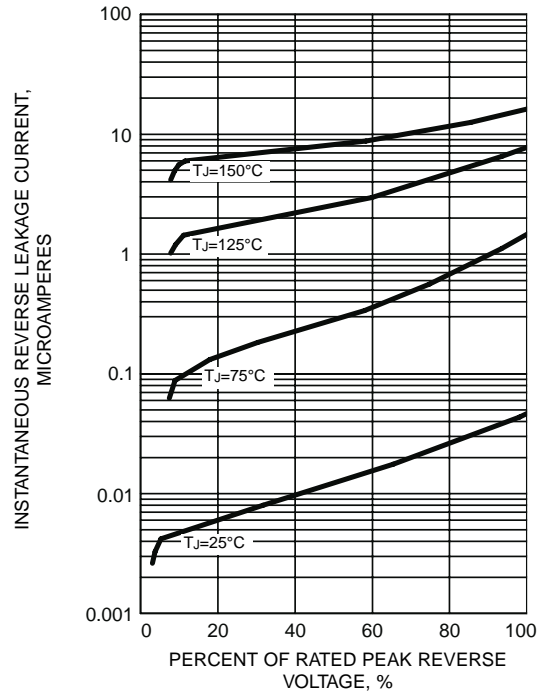


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

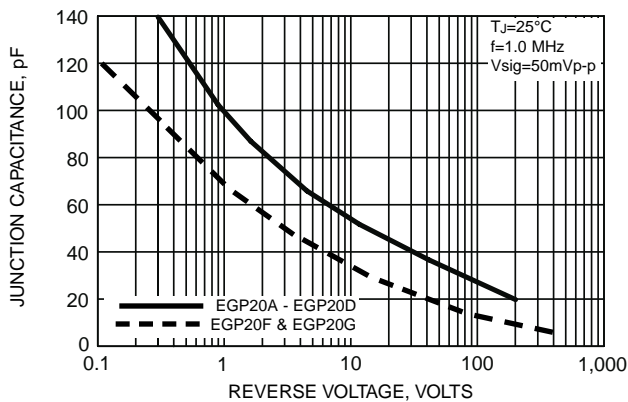


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

