

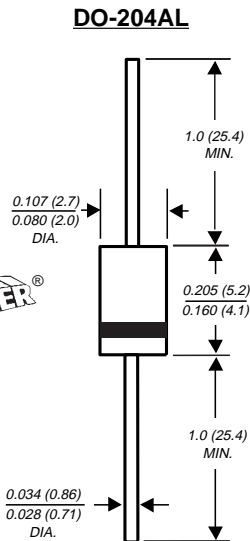
EGP10A THRU EGP10G

GLASS PASSIVATED FAST EFFICIENT RECTIFIER

Reverse Voltage - 50 to 400 Volts Forward Current - 1.0 Ampere

PATENTED *

SUPERRECTIFIER®



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	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)	1.0						Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	30.0						Amps
Maximum instantaneous forward voltage at 1.0A	V _F	0.95				1.25		Volts
Maximum DC reverse current at rated DC blocking voltage	I _R	5.0 100						μA
Maximum reverse recovery time (NOTE 1)	t _{rr}	50.0						ns
Typical junction capacitance (NOTE 2)	C _J	22.0				15.0		pF
Typical thermal resistance (NOTE 3)	R _{θJA}	50.0						°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 at 0.375" (9.5mm) lead length, P.C.B. mounted

RATINGS AND CHARACTERISTICS CURVES EGP10A THRU EGP10G

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE

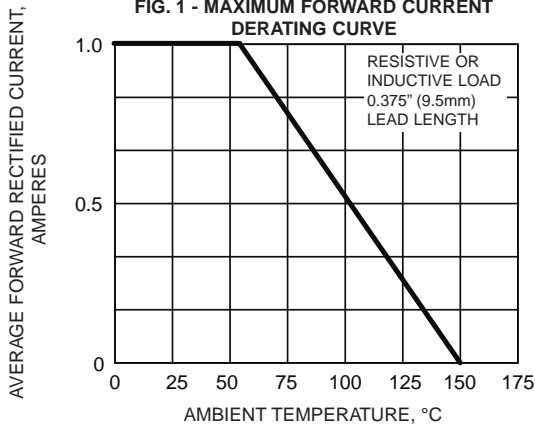


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

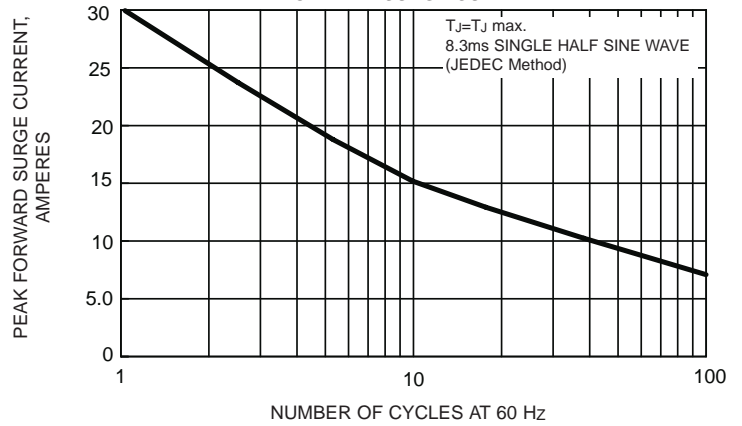


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

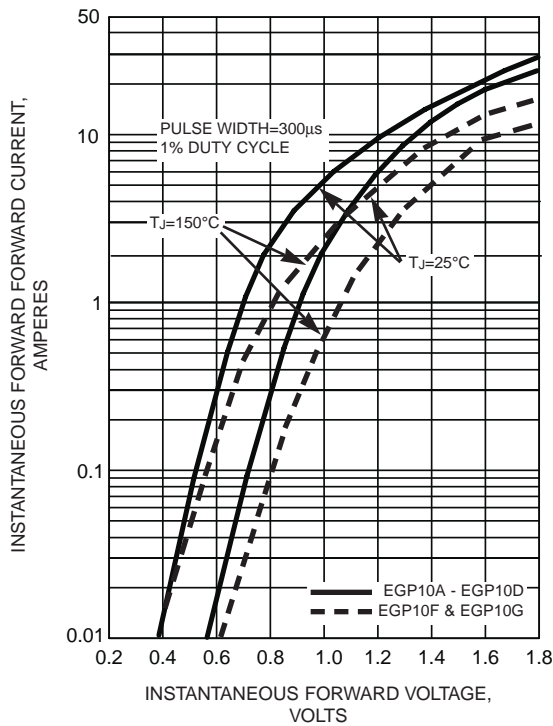


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

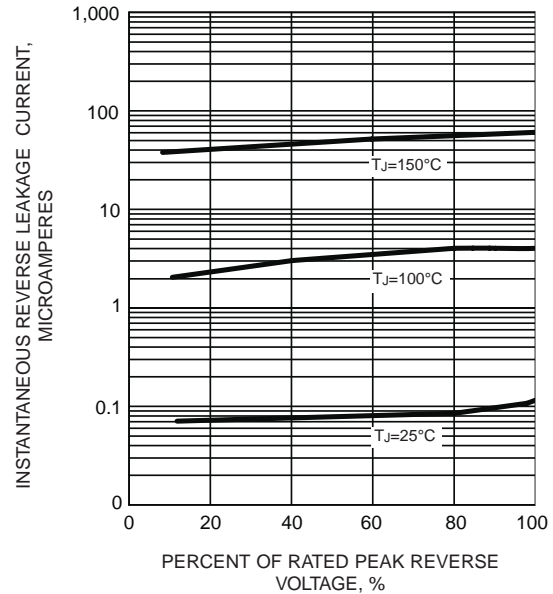


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

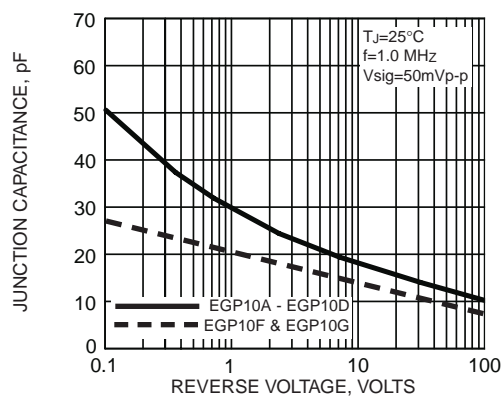


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

