



# EG110B THRU EG110M

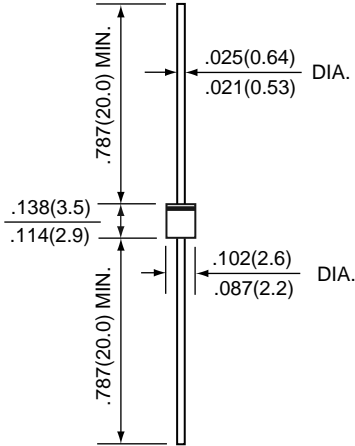
## GLASS PASSIVATED JUNCTION HIGH EFFICIENT RECTIFIER

*Reverse Voltage - 100 to 1000 Volts*

*Forward Current - 1.0 Ampere*



**R-1**



\*Dimensions in inches and (millimeters)

### FEATURES

- \* 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 soldering guaranteed: 260°C/10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3 kg) tension
- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0

### MECHANICAL DATA

**Case :** R-1 molded plastic over glass body

**Terminals :** Tin Plated, solderable per MIL-STD-750, Method 2026

**Polarity :** Color band denotes cathode end

**Weight :** 0.064 ounces , 0.181 gram

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.		SYMBOLS	EG110B	EG110D	EG110G	EG110J	EG110K	EG110M	UNITS
Maximum repetitive peak reverse voltage		VRRM	100	200	400	600	800	1000	Volts
Maximum RMS voltage		VRMS	70	140	280	420	560	700	Volts
Maximum DC blocking voltage		VDC	100	200	400	600	800	1000	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length (SEE FIG.1)		I (AV)	1.0						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	25						Amps
Maximum instantaneous forward voltage at 1.0 A		VF	1.0		1.25		1.7		Volts
Maximum DC reverse current at rated DC blocking voltage	TA=25°C TA=125°C TA=150°C	IR	5 30 50			5 50 -			uA
Maximum reverse recovery time (NOTE 1)		trr	50			75			nS
Typical junction capacitance (NOTE 2)		CJ	15						pF
Typical thermal resistance (NOTE 3)		RθJA	50						°C / W
Operating junction and storage temperature range		TJ,TSTG	-65 to +175						°C

NOTES : (1) Reverse recovery test condition : IF 0.5A, IR = 1.0A, Irr = 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 lengths, P.C.B. mounted.

# RATINGS AND CHARACTERISTIC CURVES EG110B THRU EG110M

FIG.1 - FORWARD CURRENT DERATING CURVE

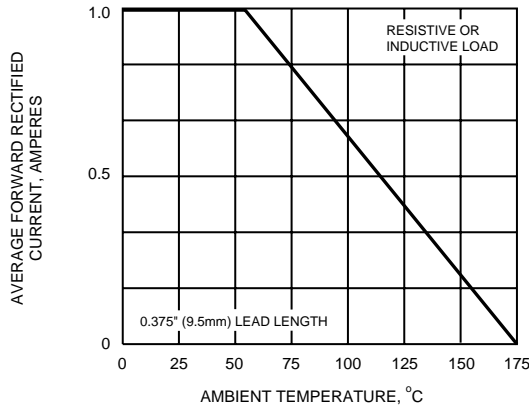


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

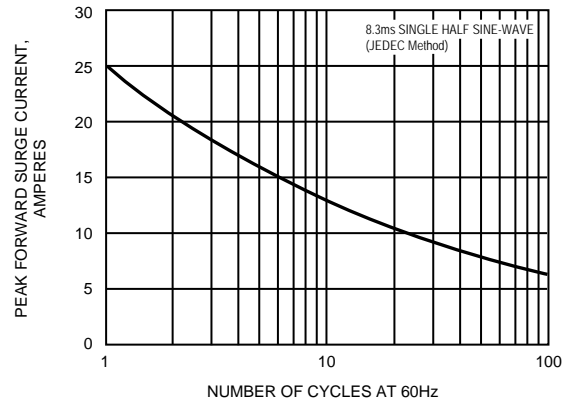


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

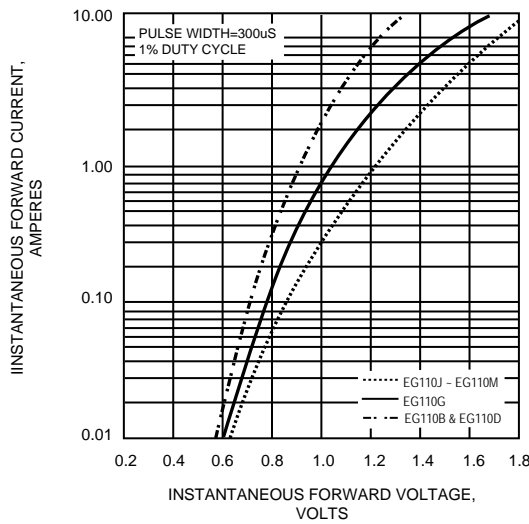


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

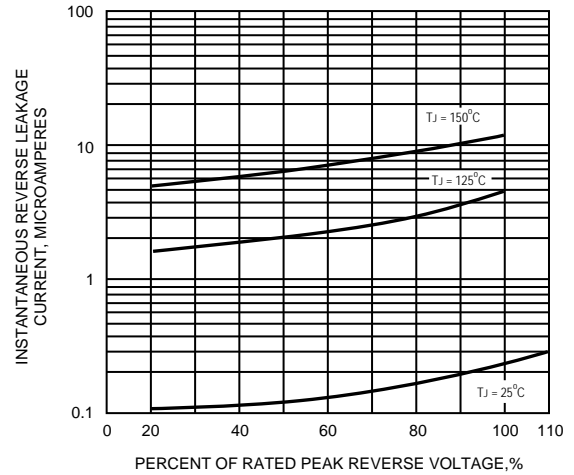


FIG.5 - TYPICAL JUNCTION CAPACITANCE

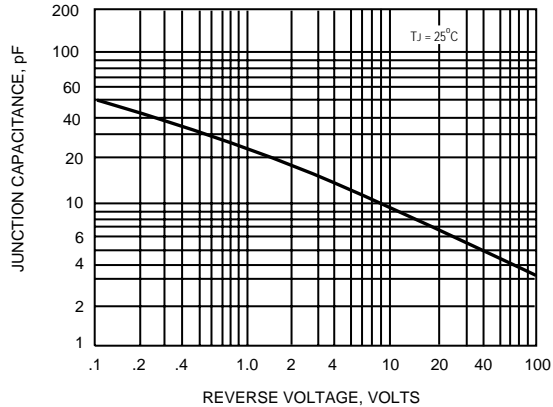


FIG.6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

