



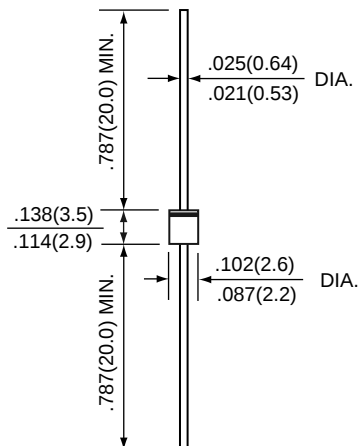
RG110B THRU RG110M

SINTERED GLASS PASSIVATED JUNCTION FAST RECOVERY 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
- * For use in high frequency rectifier circuits
- * Fast switching for high efficiency
- * 1.0 Ampere operation at $T_A=55^{\circ}\text{C}$ with no thermal runaway
- * Typical IR less than 0.1uA
- * High temperature soldering guaranteed: $260^{\circ}\text{C}/10$ 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

<i>Ratings at 25 °C ambient temperature unless otherwise specified.</i>	SYMBOLS	RG110B	RG110D	RG110G	RG110J	RG110K	RG110M	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	1.3						Volts
Maximum DC reverse current TA=25°C TA=125°C at rated DC blocking voltage TA=150°C	IR	5 50 100						uA
Maximum reverse recovery time (NOTE 1)	trr	150			250	500		nS
Typical junction capacitance (NOTE 2)	CJ	15						pF
Typical thermal resistance (NOTE 3)	R θJA	55						°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 RG110B THRU RG110M

FIG.1 - FORWARD CURRENT DERATING CURVE

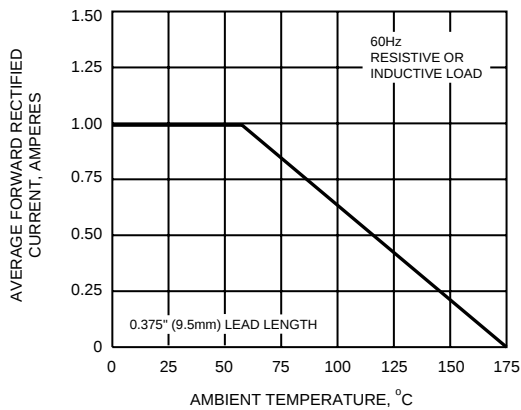


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

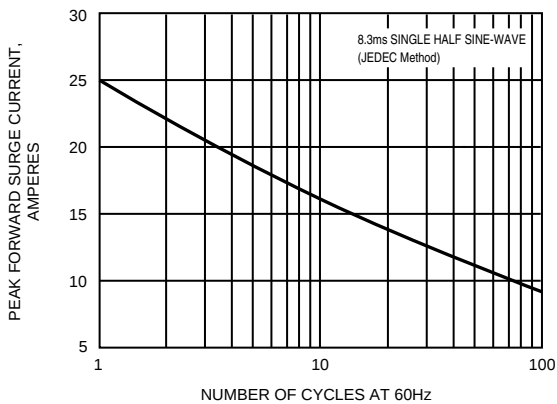


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

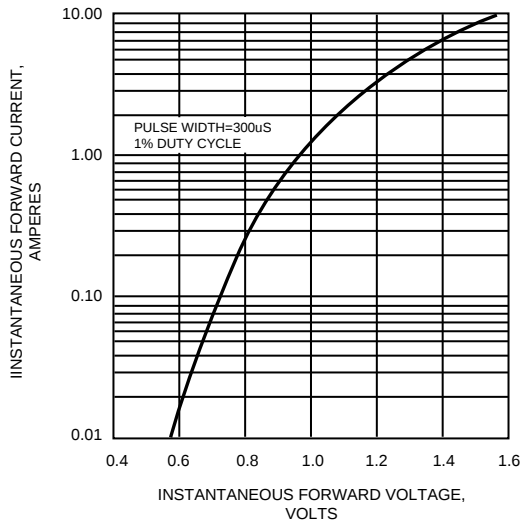


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

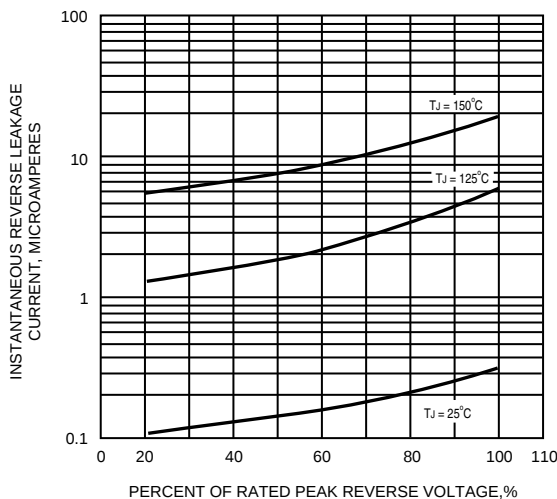


FIG.5 - TYPICAL JUNCTION CAPACITANCE

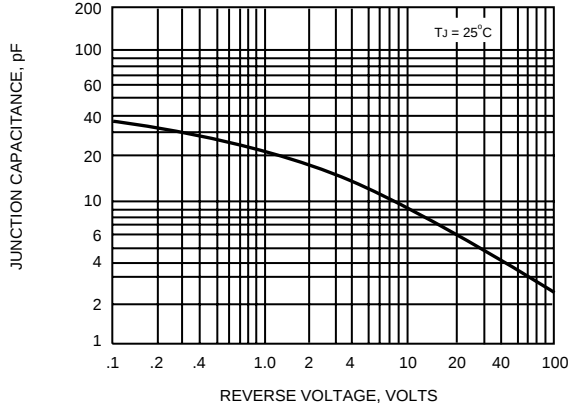


FIG.6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

