



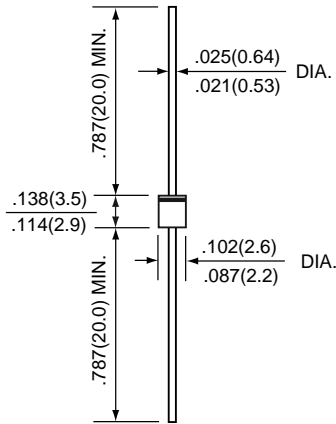
UG110BH THRU UG110KH

SINTERED GLASS PASSIVATED JUNCTION ULTRAFAST EFFICIENT RECTIFIER

Reverse Voltage - 100 to 1000 Volts

Forward Current - 1.0 Ampere

R-1



*Dimensions in inches and (millimeters)



FEATURES

- * Halogen-free type
- * Glass passivated cavity-free junction
- * Ultrafast 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	UG110BH	UG110DH	UG110GH	UG110JH	UG110KH	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	100	200	400	600	800	Volts
Maximum RMS voltage	V _{RMS}	70	140	280	420	560	Volts
Maximum DC blocking voltage	V _{DC}	100	200	400	600	800	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)	I _{FSM}	25					Amps
Maximum instantaneous forward voltage at 1.0 A	V _F	0.95		1.25	1.7	2.2	Volts
Maximum DC reverse current at rated DC blocking voltage	I _R			5	100		uA
							TA=25°C TA=125°C
Maximum reverse recovery time (NOTE 1)	t _{rr}	35					nS
Typical junction capacitance (NOTE 2)	C _J	40		25			pF
Typical thermal resistance (NOTE 3)	R _{θJA}	50					°C / W
Operating junction and storage temperature range	T _J ,T _{STG}	-65 to +150					°C

NOTES : (1) Reverse recovery test condition : 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 lengths, P.C.B. mounted.

RATINGS AND CHARACTERISTIC CURVES UG110BH THRU UG110KH

FIG.1 - FORWARD CURRENT DERATING CURVE

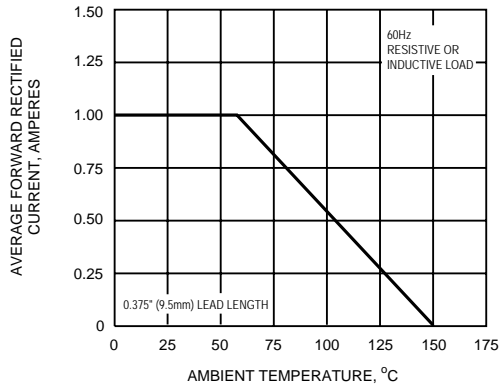


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

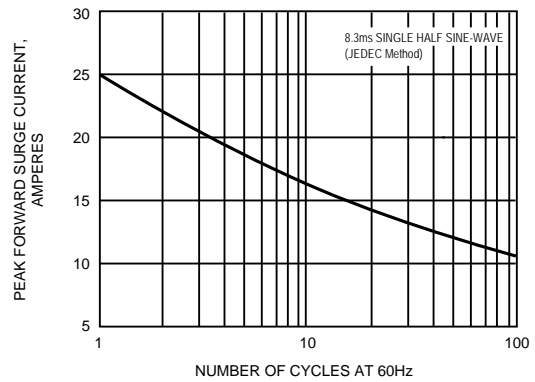


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

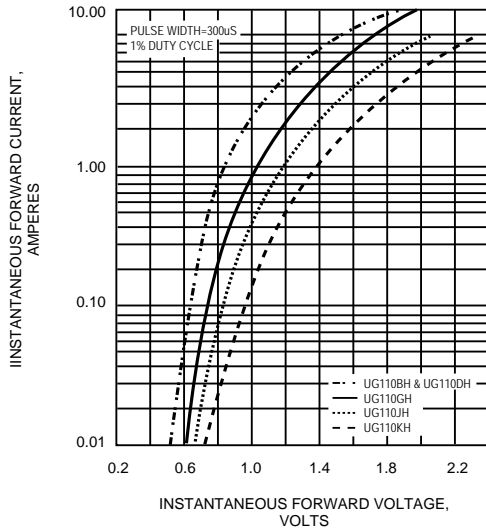


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

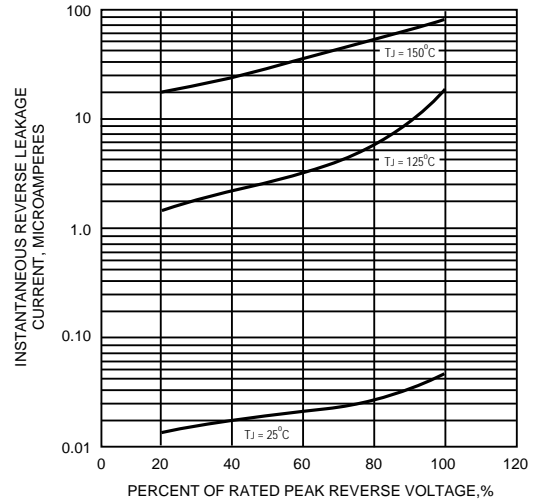


FIG.5 - TYPICAL JUNCTION CAPACITANCE

