



ZRGC6MM

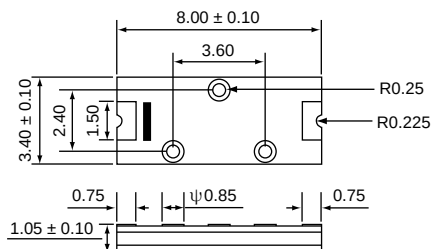
HIGH VOLTAGE SURFACE MOUNT GLASS PASSIVATED JUNCTION FAST RECOVERY RECTIFIER

Reverse Voltage - 6000 Volts

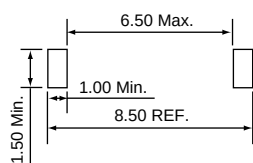
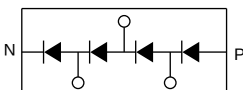
Forward Current - 0.35 Ampere

PATENTED

8034



Mounting PAD



*Dimensions in millimeters

SuperChipTM
SUPEREX IITM



FEATURES

- * Halogen-free type
- * Compliance to RoHS product
- * Internal structure with GPRC (glass passivated rectifier chip) inside
- * Leadless chip form, no lead damage
- * Lead-free solder Joint, No Wire bond & Lead Frame
- * Low profile package
- * For surface mounted applications
- * Low power loss, High efficiency
- * High current capability
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0

MECHANICAL DATA

Case : Packed with FRP substrate and epoxy underfilled

Terminals : Pure Tin plated (Lead-Free),
solderable per MIL-STD-750, Method 2026.

Polarity : Color Cathode band marking

Weight : 0.055 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	SYMBOLS	ZRGC6MM	UNITS
Maximum repetitive peak reverse voltage	VRRM	6000	Volts
Maximum RMS voltage	VRMS	4200	Volts
Maximum DC blocking voltage	VDC	6000	Volts
Maximum average forward rectified current $T_L = 120\text{ }^{\circ}\text{C}$	I(AV)	0.35	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	IFSM	15	Amps
Maximum instantaneous forward voltage at $I_F = 0.35\text{A}$	V_F	8	Volts
Maximum DC reverse current at rated DC blocking voltage $T_A = 25\text{ }^{\circ}\text{C}$	I_R	10	uA
Maximum reverse recovery time (NOTE 1)	trr	500	nS
Typical junction capacitance (NOTE 2)	C_J	4	pF
Operating junction and storage temperature range	T_J, T_STG	-65 to +175	°C

NOTES : (1) Reverse recovery test condition : $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$

(2) Measured at 1.0MHz and applied reverse voltage of 4.0 volts

(3) Preliminary draft.

RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

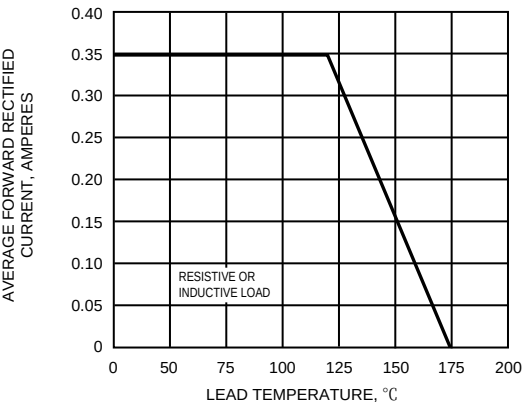


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

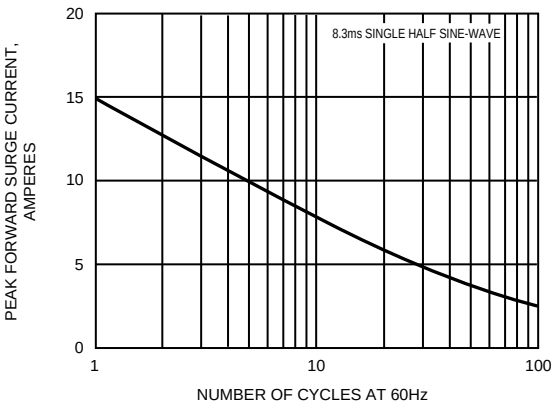


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

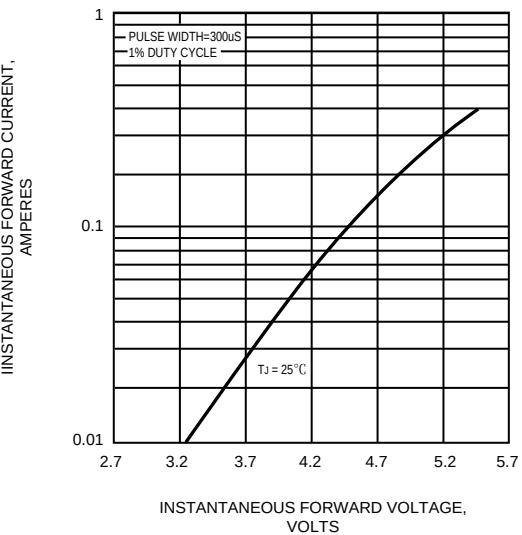


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

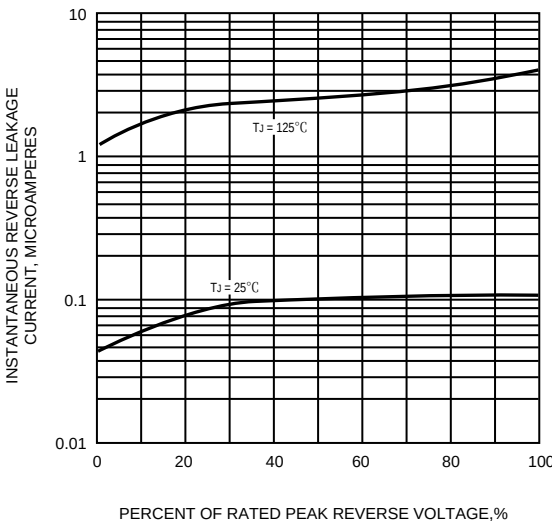


FIG.5 - TYPICAL JUNCTION CAPACITANCE

