

GE1S-G

HIGH VOLTAGE ULTRAFAST RECTIFIER DIODE

PRV : 2500 Volts

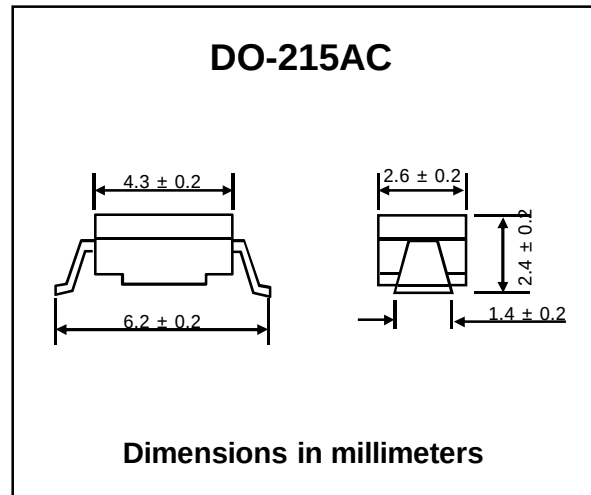
Io : 0.5 Ampere

FEATURES :

- * Glass passivated junction chip
- * High surge current capability
- * High reliability
- * Low reverse current
- * Fast recovery time
- * **Pb Free / RoHS Compliant**

MECHANICAL DATA :

- * Case : DO-215AC Molded plastic
- * Epoxy : UL94V-0 rate flame retardant
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.060 gram (Approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

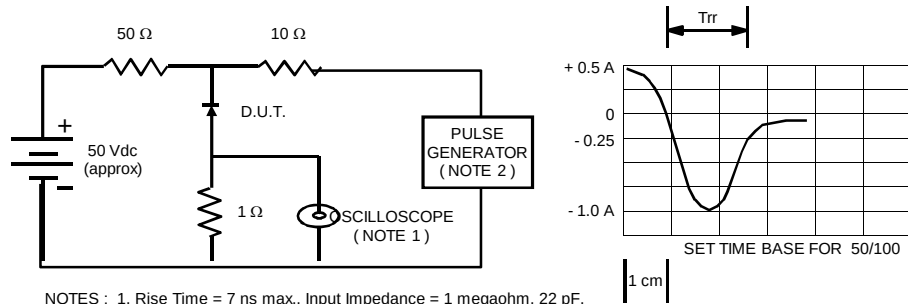
RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	2500	V
Maximum RMS Voltage	V_{RMS}	1750	V
Maximum DC Blocking Voltage	V_{DC}	2500	V
Maximum Average Forward Current $T_a = 75^{\circ}C$ at 8.3 ms Single Half sine-wave	$I_{F(AV)}$	0.5	A
Maximum Non-Repetitive Peak Forward Surge Current	I_{FSM}	20	A
Maximum Peak Forward Voltage at $I_F = 0.5$ A	V_F	9.0	V
Maximum DC Reverse Current $T_J = 25^{\circ}C$ at Rated DC Blocking Voltage $T_J = 100^{\circ}C$	I_R	5.0	μA
	$I_{R(H)}$	500	μA
Reverse Recovery Time (Note 1)	T_{rr}	100	ns
Operating Junction Temperature Range	T_J	- 40 to + 150	$^{\circ}C$
Storage Temperature Range	T_{STG}	- 40 to + 150	$^{\circ}C$

Note :

(1) Reverse Recovery Test Conditions : $I_F = 0.5$ A, $I_R = 1.0$ A, $I_{rr} = 0.25$ A.

RATING AND CHARACTERISTIC CURVES (GE1S-G)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES : 1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.
2. Rise time = 10 ns max., Source Impedance = 50 ohms.
3. All Resistors = Non-inductive Types.

FIG. 2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

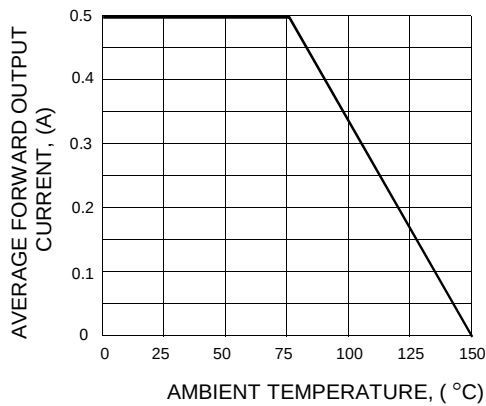


FIG. 3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

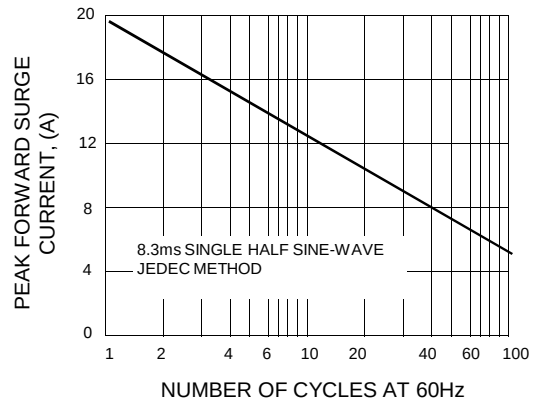


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

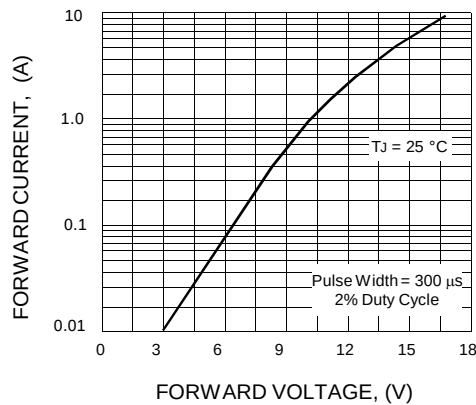


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

