

SE1N-G

HIGH VOLTAGE ULTRAFAST RECTIFIER DIODE

PRV : 1200 Volts

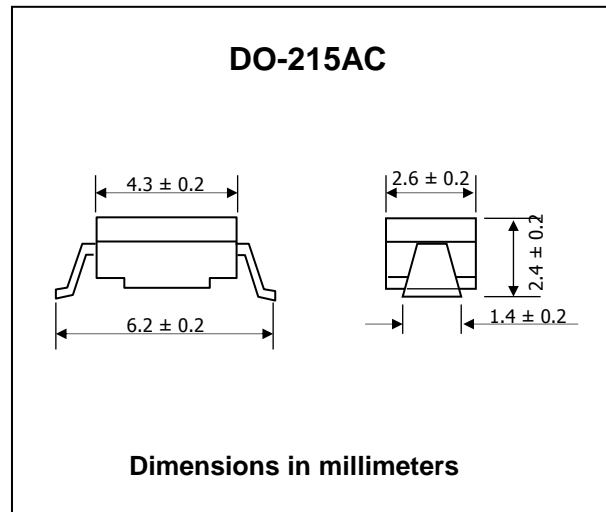
Io : 1.0 Ampere

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}	1200	V
Maximum RMS Voltage	V_{RMS}	840	V
Maximum DC Blocking Voltage	V_{DC}	1200	V
Maximum Average Forward Current $T_a = 75^\circ\text{C}$ at 8.3 ms Single Half sine-wave	$I_{F(AV)}$	1.0	A
Maximum Non-Repetitive Peak Forward Surge Current	I_{FSM}	30	A
Maximum Peak Forward Voltage at $I_F = 1.0\text{ A}$	V_F	2.2	V
Maximum DC Reverse Current $T_j = 25^\circ\text{C}$	I_R	5.0	μA
at Rated DC Blocking Voltage $T_j = 100^\circ\text{C}$	$I_{R(H)}$	50	μA
Reverse Recovery Time (Note 1)	T_{rr}	75	ns
Operating Junction Temperature Range	T_J	- 40 to + 150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 40 to + 150	$^\circ\text{C}$

Note :

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

RATING AND CHARACTERISTIC CURVES (SE1N-G)

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

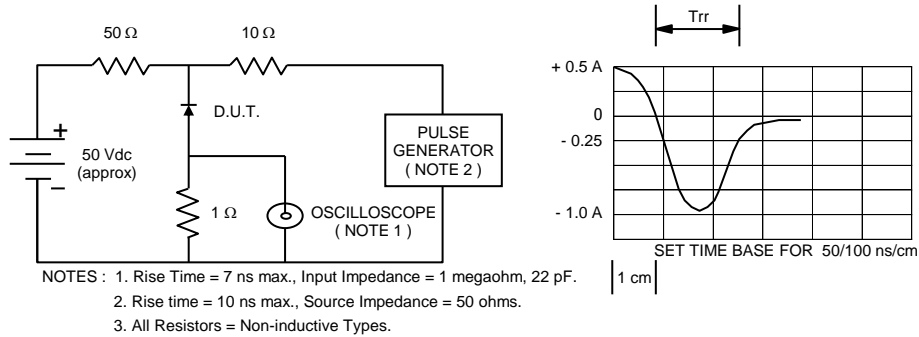


FIG. 2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

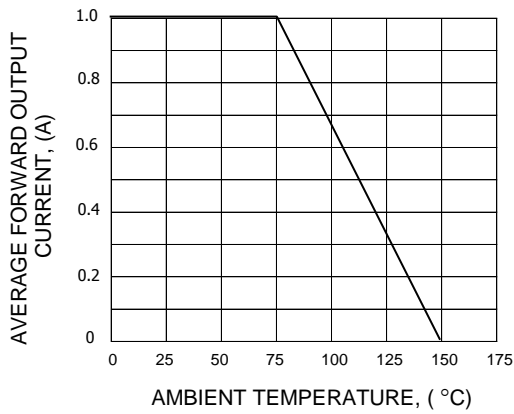


FIG. 3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

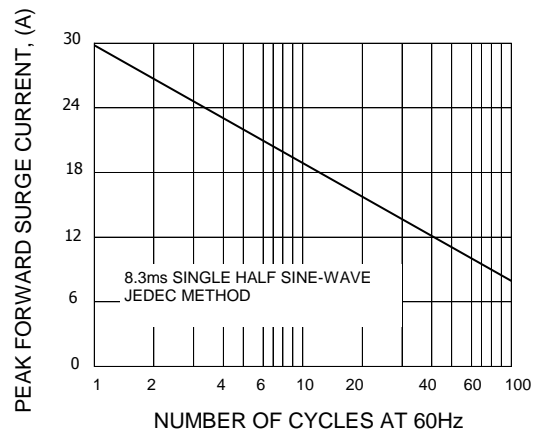


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

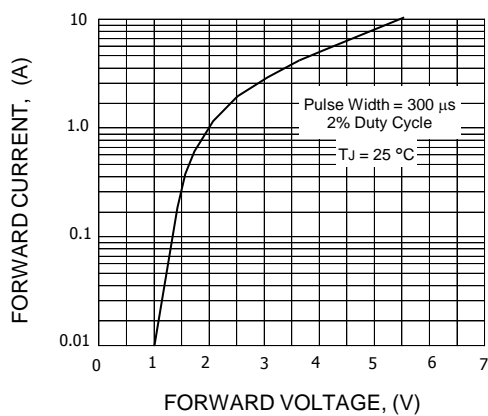


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

