

FEATURES

- ◇ Low cost
- ◇ Diffused junction

MECHANICAL DATA

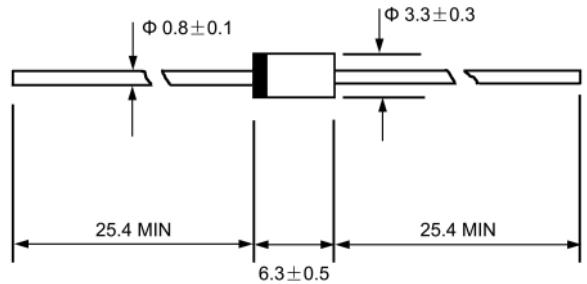
- ◇ Case: JEDEC DO-15, molded plastic

Method 208

- ◇ Mounting: Any

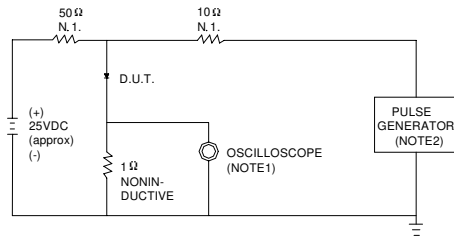
Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

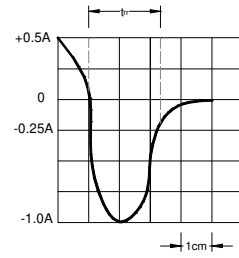


Maximum peak repetitive reverse voltage	V_{RRM}	400	600	V
Maximum RMS voltage	V_{RMS}	280	420	V
Maximum DC blocking voltage	V_{DC}	400	600	V
Maximum average forward rectified current				
9.5mm lead length, @ $T_A=75^\circ\text{C}$				
Peak forward surge current				
8.3ms single half-sine-wave				
superimposed on rated load @ $T_J=125^\circ\text{C}$				
Maximum instantaneous forward voltage	V_F	1.8	2.0	V
@ $I_F=I_{F(AV)}$				
Maximum reverse current				
@ $T_A=25^\circ\text{C}$				
at rated DC blocking voltage @ $T_A=100^\circ\text{C}$				
Maximum reverse recovery time (Note1)	t_{rr}			ns
Typical junction capacitance (Note2)	C_J		30	pF
Typical thermal resistance (Note3)	$R_{\theta JL}$			$^\circ\text{C}$

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



NOTES: 1. RISE TIME = 7ns MAX. INPUT IMPEDANCE = 1MΩ. 22pF.
 2. RISE TIME = 10ns MAX. SOURCE IMPEDANCE = 50 Ω.



SET TIME BASE FOR 10/20 ns/cm

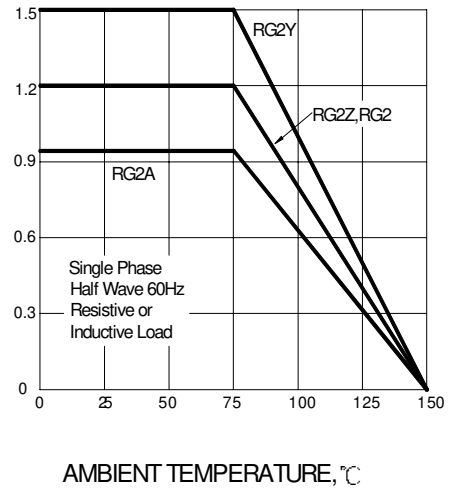
FIG.2 – TYPICAL FORWARD CHARACTERISTIC

INSTANTANEOUS FORWARD CURRENT
AMPERES

INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG.3 – FORWARD DERATING CURVE

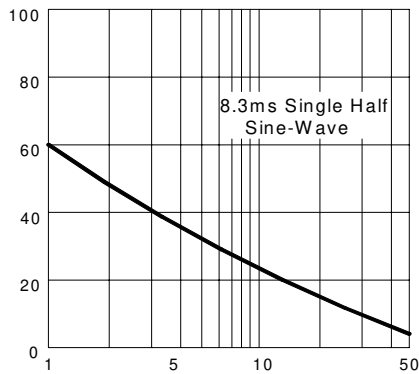
AVERAGE FORWARD RECTIFIED CURRENT
AMPERES



AMBIENT TEMPERATURE, °C

FIG.4 – PEAK FORWARD SURGE CURRENT

PEAK FORWARD SURGE CURRENT
AMPERES



NUMBER OF CYCLES AT 60Hz

FIG.5 – TYPICAL JUNCTION CAPACITANCE

JUNCTION CAPACITANCE, pF

REVERSE VOLTAGE, VOLTS