

GLASS PASSIVATED RECTIFIERS

VOLTAGE RANGE: 50 --- 1000 V
CURRENT: 1.0 A

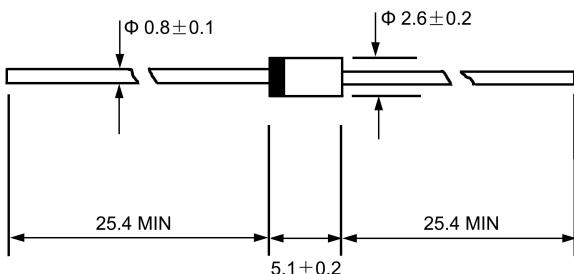
FEATURES

- ◇ The plastic package carries underwriters laboratory flammability classification 94V-O
- ◇ Low reverse leakage
- ◇ High current capability
- ◇ Glass passivated junction
- ◇ Low forward voltage drop
- ◇ High temperature soldering guaranteed:
350°C/10 seconds, 0.375"(9.5mm) lead length,
5lbs, (2.3kg) tension

MECHANICAL DATA

- ◇ Case: JEDEC DO-41, molded plastic
- ◇ Terminals: Axial lead, solderable per MIL-STD-202, Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.012 ounces, 0.34 grams
- ◇ Mounting position: Any

DO - 41



Dimensions in millimeters

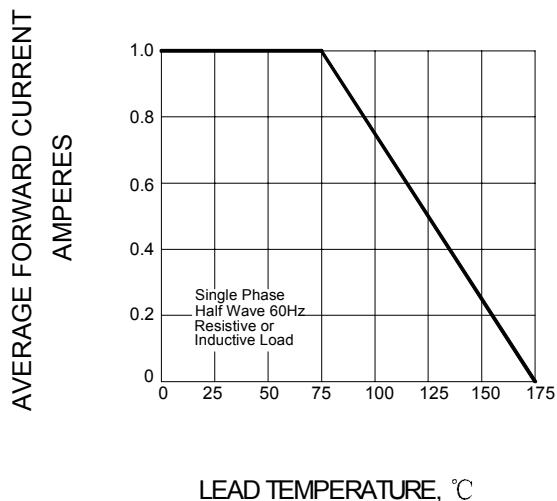
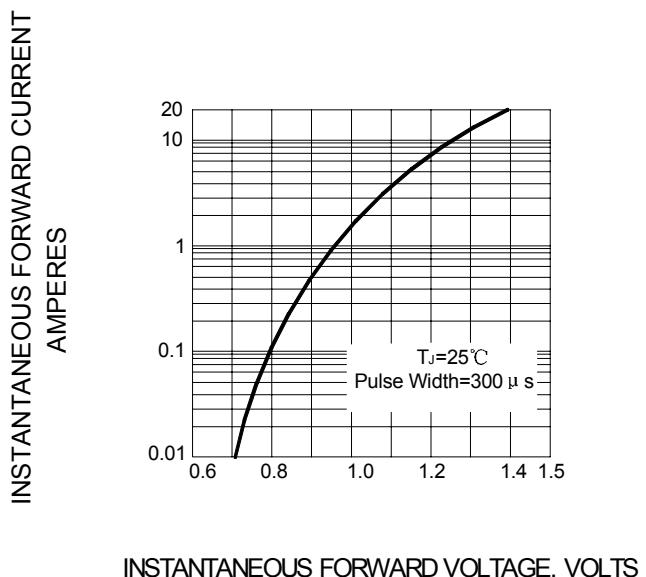
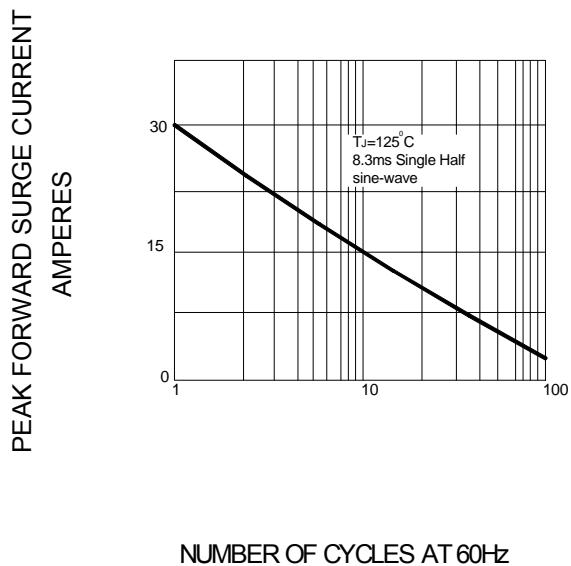
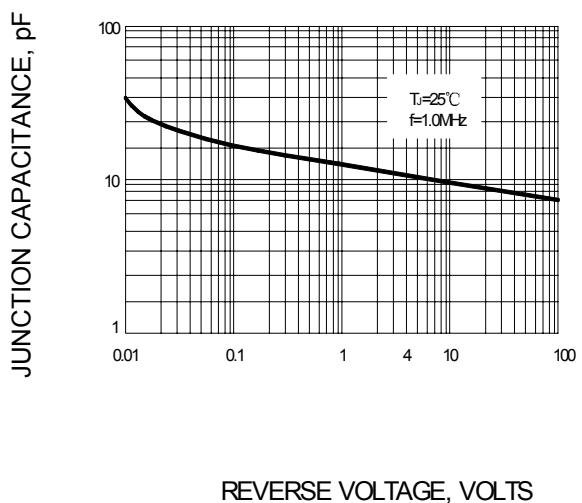
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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%.

		1N 4001G	1N 4002G	1N 4003G	1N 4004G	1N 4005G	1N 4006G	1N 4007G	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current 9.5mm lead length, $\text{@}T_A=75^\circ\text{C}$	$I_{F(AV)}$	1.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load $\text{@}T_J=125^\circ\text{C}$	I_{FSM}	30							A
Maximum instantaneous forward voltage at 1.0 A	V_F	1.1							V
Maximum reverse current $\text{@}T_A=25^\circ\text{C}$ at rated DC blocking voltage $\text{@}T_A=100^\circ\text{C}$	I_R	5.0 50.0							μA
Typical junction capacitance (Note)	C_J	15							pF
Operating junction temperature range	T_J	- 55 ---- + 175							$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 ---- + 175							$^\circ\text{C}$

NOTE: Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

FIG.1 – FORWARD CURRENT DERATING CURVE**FIG.2 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS****FIG.3 – PEAK FORWARD SURGE CURRENT****FIG.4 – TYPICAL JUNCTION CAPACITANCE**

NUMBER OF CYCLES AT 60Hz

REVERSE VOLTAGE, VOLTS