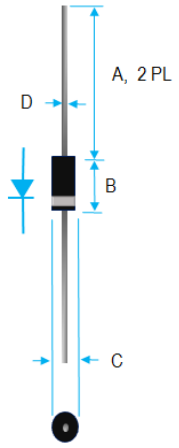
1N4001G THRU 1N4007G SPECIFICATIONS

Rev. A

1A GENERAL PURPOSE GLASS PASSIVATED RECTIFIER



Dim.	Value Inch[mm] Min.	Max.
A	1.000[25.40]	---
B	0.166[4.22]	0.205[5.21]
C	0.080[2.03]	0.107[2.72]
D	0.028[0.71]	0.034[0.86]

PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION: 94V-0
2. GLASS PASSIVATED CHIP JUNCTION
3. HIGH SURGE CURRENT CAPABILITY
4. CASE: TRANSFER MOLDED, DO-41
5. DIMENSIONS IN INCHES AND (MILLIMETERS)
6. POLARITY: INDICATED BY CATHODE BAND
7. WEIGHT: 0.34 GRAMS
8. LEADS: SOLDERABILITY PER MIL-STD-202 METHOD 208
9. RoHS

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED STORAGE AND OPERATING TEMPERATURE RANGE -55°C TO +150°C. SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%.

RATINGS	SYMBOL	VALUE	UNITS
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT, 0.375"(9.5mm) LEAD LENGTH @ 55°C	I_O	1	A
PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	30	A
TYPICAL JUNCTION CAPACITANCE(NOTE1)	C_J	15	pF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta jc}$	50	°C/W
MAXIMUM FORWARD VOLTAGE	V_F	1.1	V
MAXIMUM REVERSE CURRENT @ 25°C	I_R	5	uA
MAXIMUM REVERSE CURRENT @ 100°C	I_R	50	uA

1. MEASURED @ 1.0 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 V
2. BOTH LEADS ATTATCHED TO HEATSINK 20x20x1T (mm) COPPER PLATE AT LEAD LENGTH 5mm
3. MAXIMUM FORWARD VOLTAGE AT I_o DC

PART NUMBER	MAX RECURRENT PK REV VOLTAGE V_{RRM} (V)	MAX RMS VOLTAGE V_{RMS} (V)	MAX DC BLOCKING VOLTAGE V_{DC} (V)
1N4001G	50	35	50
1N4002G	100	70	100
1N4003G	200	140	200
1N4004G	400	280	400
1N4005G	600	420	600
1N4006G	800	560	800
1N4007G	1000	700	1000

RATING AND CHARACTERISTIC CURVES

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

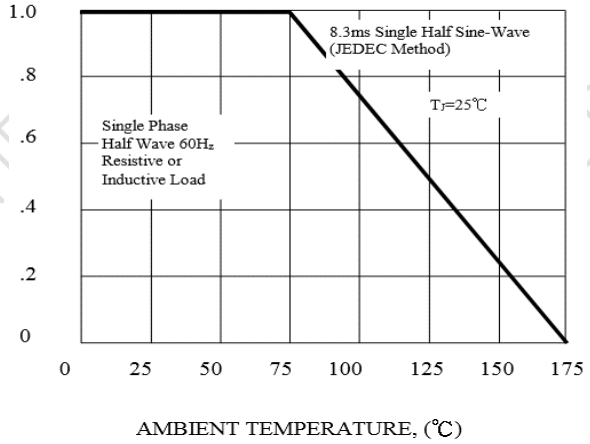


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

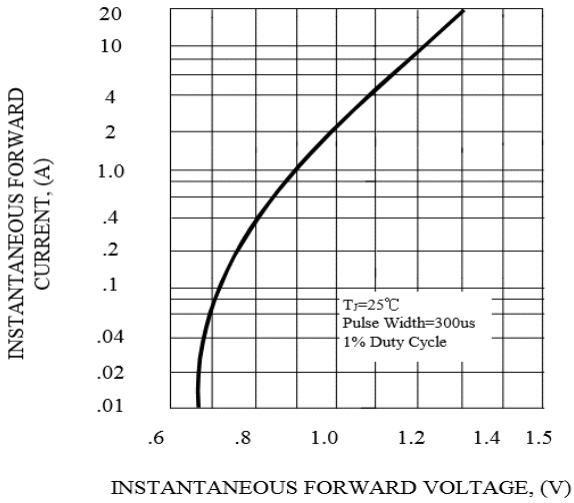


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

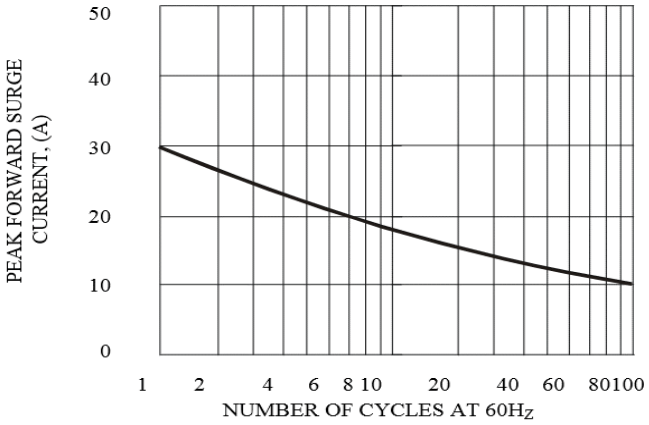


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

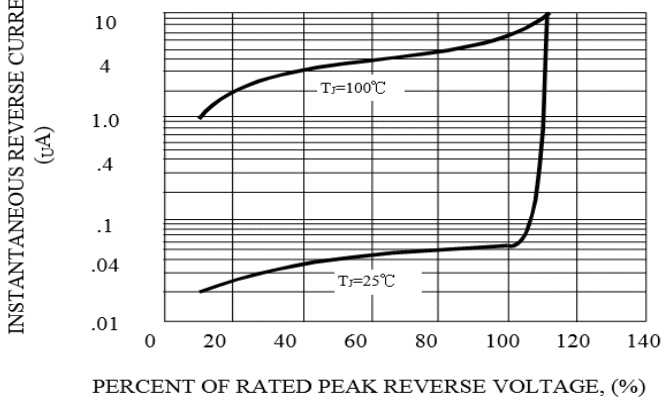
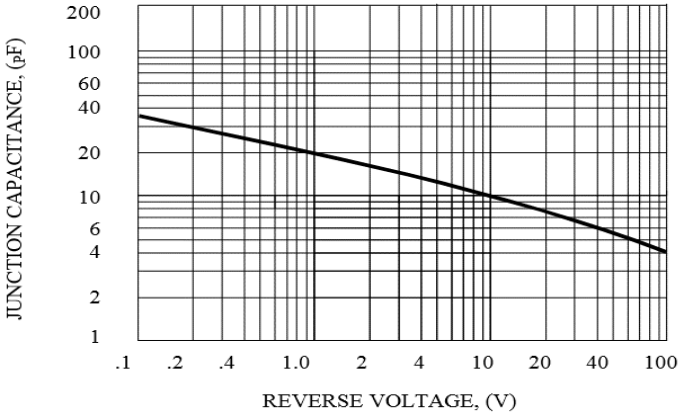



FIG. 5 -TYPICAL JUNCTION CAPACITANCE