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1.5A GENERAL PURPOSE PLASTIC RECTIFIER

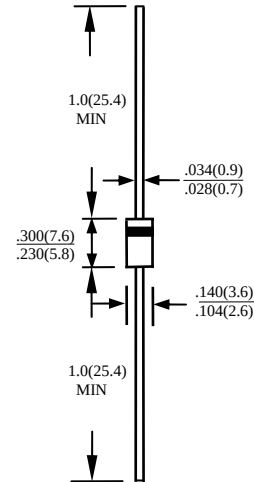
1N5391 THRU 1N5399

FEATURES

- HIGH SURGE CURRENT CAPABILITY
- PLASTIC PACKAGE HAS UNDERWRITERS LABORATORY FLAMMABILITY CLASSIFICATION 94V-0
- EXCEEDS ENVIRONMENTAL STANDARDS OF MIL-STD-19500
- 1.5 AMPERE OPERATION AT $T_L=70^{\circ}\text{C}$ WITH NO THERMAL RUNAWAY
- TYPICAL IR LESS THAN $1\mu\text{A}$
- VOID-FREE MOLDED PLASTIC
- HIGH TEMPERATURE SOLDERING GUARANTEED: $250^{\circ}\text{C}/10\text{S}$ /0.375", (9.5mm) LEAD LENGTH/5 LBS. (2.3KG) TENSION

MECHANICAL DATA

- CASE: MOLDED PLASTIC, DO15, DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINAL: AXIAL LEADS, SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY: COLOR BAND DENOTES CATHODE
- MOUNTING POSITION: ANY
- WEIGHT: 0.4 GRAMS



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 CURRENT BY 20%

RATINGS	SYMBOL	1N5391	1N5392	1N5393	1N5395	1N5397	1N5398	1N5399	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 0.375"(9.5mm) LEAD LENGTH AT $T_L=70^{\circ}\text{C}$	I_O	1.5							A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	50							A
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta ja}$	40							$^{\circ}\text{C}/\text{W}$
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	15							PF
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO + 175							$^{\circ}\text{C}$
OPERATING TEMPERATURE RANGE	T_{OP}	- 55 TO + 175							$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($A_T T_A=25^{\circ}\text{C}$ UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	1N5391	1N5392	1N5393	1N5395	1N5397	1N5398	1N5399	UNITS
MAXIMUM FORWARD VOLTAGE AT I_O DC	V_F	1.1							V
MAXIMUM REVERSE CURRENT AT 25°C	I_R	5							μA
MAXIMUM REVERSE CURRENT AT 100°C	I_R	50							μA

NOTE: 1. MEASURED AT 1MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS

2. BOTH LEADS ATTACHED TO HEAT SINK 35x35x1t(mm) COPPER PLATE AT LEAD LENGTH 5mm

RATINGS AND CHARACTERISTIC CURVE 1N5391 THRU 1N5399

FIG. 1- FORWARD CURRENT DERATING CURVE

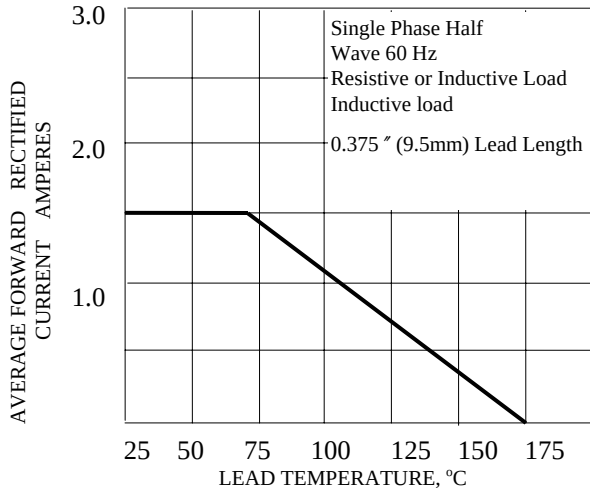


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

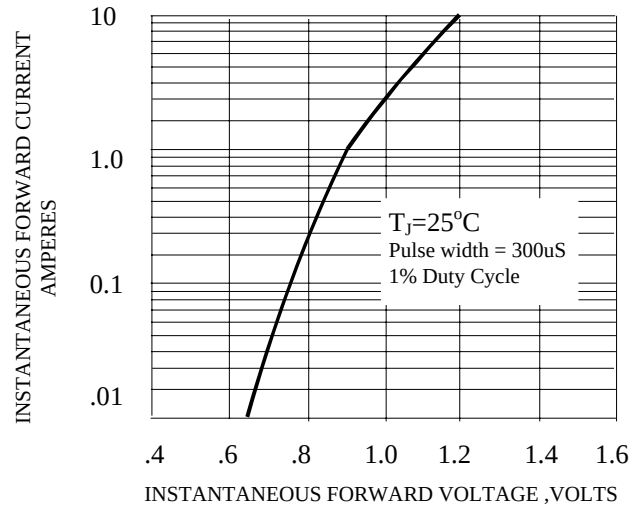


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

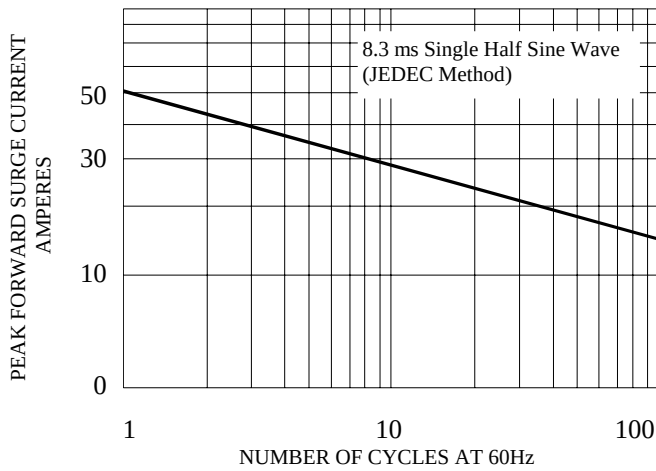


FIG. 4-TYPICAL JUNCTION CAPACITANCE

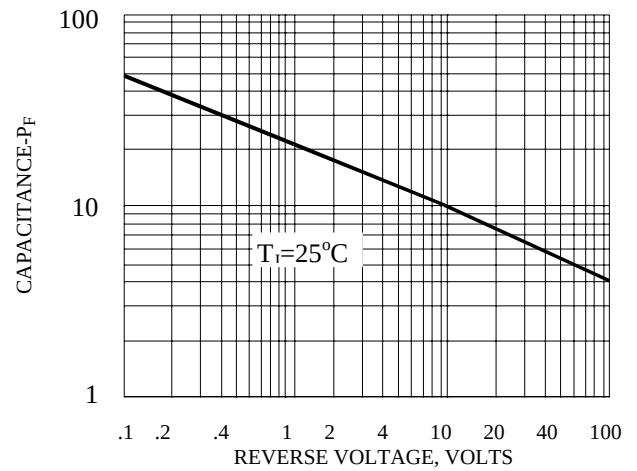


FIG. 5-TYPICAL REVERSE CAPACITANCE

