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1.5A GENERAL PURPOSE PLASTIC RECTIFIER

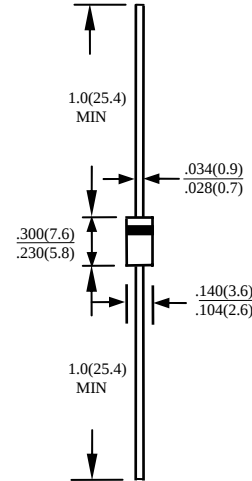
1N5391-LFR THRU 1N5399-LFR

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 I_R 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
- ROHS

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-LF R	1N5392-LF R	1N5393-LF R	1N5395-LF R	1N5397-LF R	1N5398-LF R	1N5399-LF R	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-LF R	1N5392-LF R	1N5393-LF R	1N5395-LF R	1N5397-LF R	1N5398-LF R	1N5399-LF R	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 $35 \times 35 \times 1\text{t}(\text{mm})$ COPPER PLATE AT LEAD LENGTH 5mm

RATINGS AND CHARACTERISTIC CURVE 1N5391-LFR THRU 1N5399-LFR

FIG. 1- FORWARD CURRENT DERATING CURVE

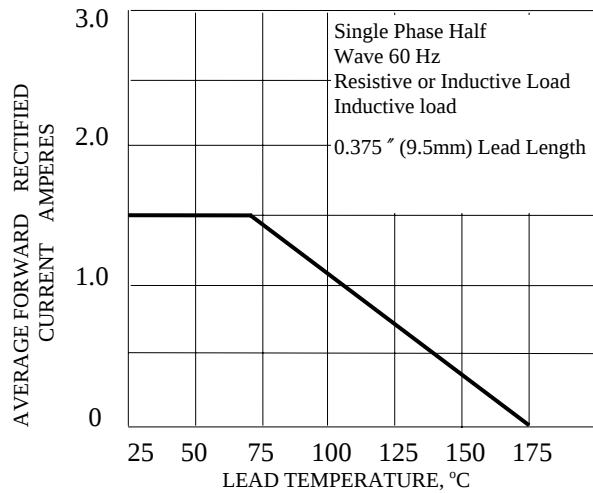


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

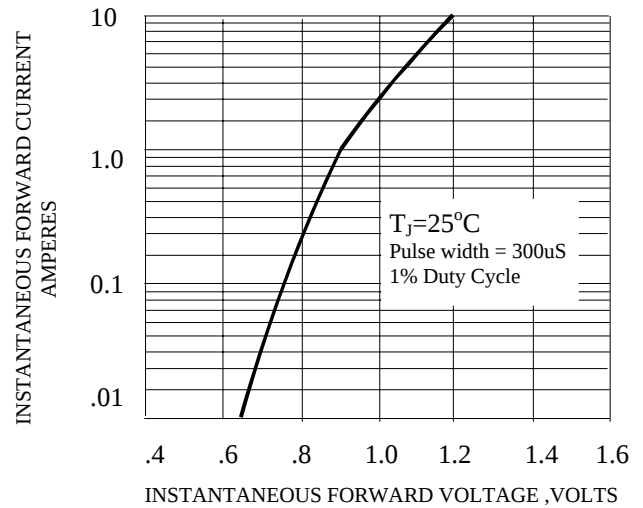


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

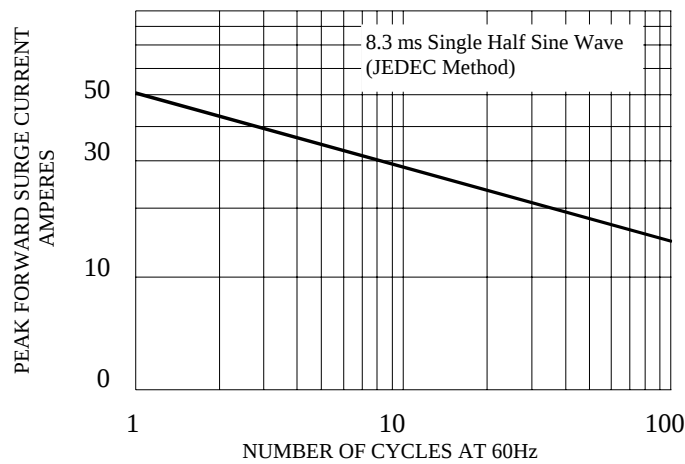


FIG. 4-TYPICAL JUNCTION CAPACITANCE

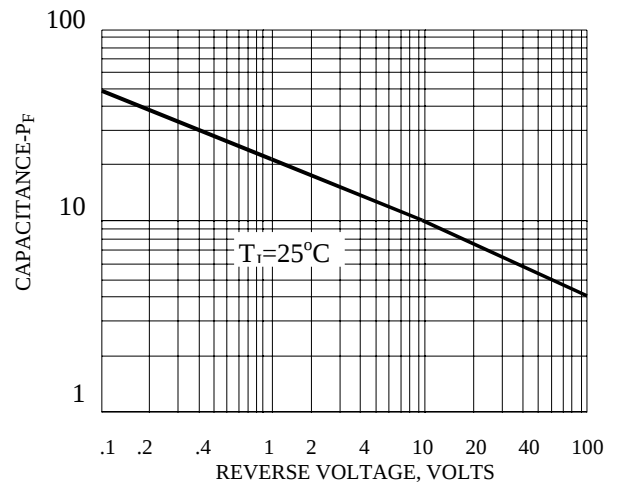


FIG. 5-TYPICAL REVERSE CAPACITANCE

