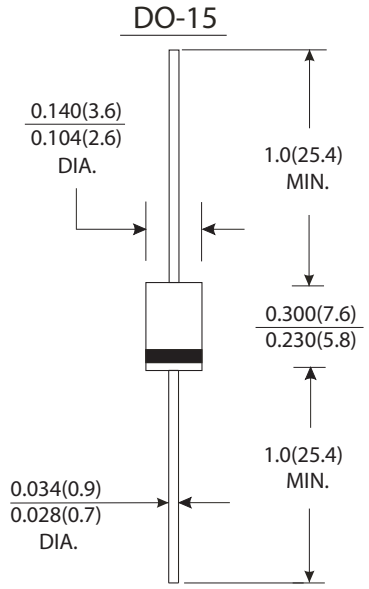
DEC

1N5391 THRU 1N5399

CURRENT 1.5 Amperes
VOLTAGE 50 to 1000 Volts

Features

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High surge current capability
- 1.5A operation at T_L=70℃ with no thermal runaway
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed : 250℃/10 seconds, 0.375"(9.5mm) lead length, 5lbs.(2.3kg) tension



Dimensions in inches and (millimeters)

Mechanical Data

- Case : JEDEC DO-15 molded plastic body
- Terminals : Lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.014 ounce, 0.33 gram

Maximum Ratings And Electrical Characteristics

(Ratings at 25℃ ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

		Symbols	1N 5391	1N 5392	1N 5393	1N 5394	1N 5395	1N 5396	1N 5397	1N 5398	1N 5399	Units
Maximum recurrent peak reverse voltage		V_{RRM}	50	100	200	300	400	500	600	800	1000	Volts
Maximum RMS voltage		V_{RMS}	35	70	140	210	280	350	420	560	700	Volts
Maximum DC blocking voltage		V_{DC}	50	100	200	300	400	500	600	800	1000	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length T_A=70℃		$I_{(AV)}$	1.5									Amps
Peak forward surge current 8.3ms half sine wave superimposed on rated load (JEDEC method) at T_A=70℃		I_{FSM}	50.0									Amps
Maximum instantaneous forward voltage at 1.5A		V_F	1.4									Volts
Maximum reverse current at rated DC blocking voltage	T_A=25℃	I_R	5.0									μA
	T_A=100℃		50.0									
Typical thermal resistance (Note 2)		$R\Theta_{JA}$ $R\Theta_{JL}$	50.0 25.0									℃/W
Typical junction capacitance (Note 1)		C_J	20.0									pF
Maximum DC Blocking Voltage Temperature		T_A	+150.0									℃
Operating and Storage temperature Range		T_J T_{STG}	-65 to +175									℃

Notes:
(1) Measured at 1MHz and applied reverse voltage of 4.0V DC.
(2) Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm) lead length, P.C.B. mounted

DEC

RATINGS AND CHARACTERISTIC CURVES 1N5391 THRU 1N5399

FIG.1-FORWARD CURRENT DERATING CURVE

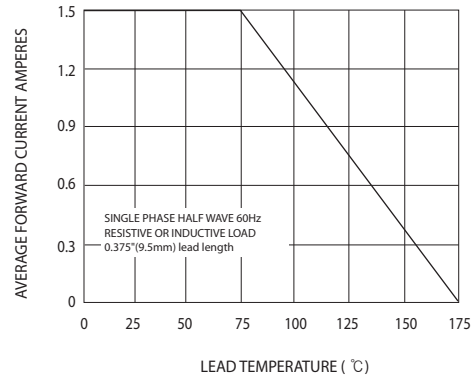


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

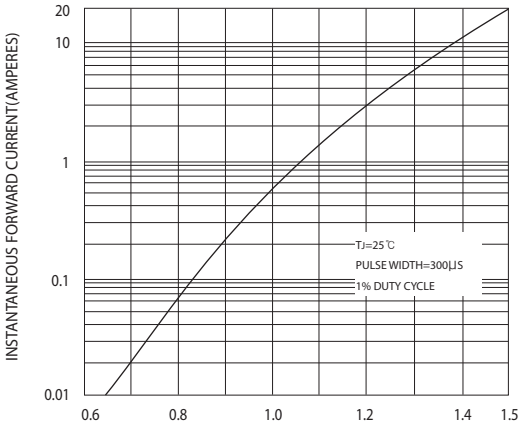


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

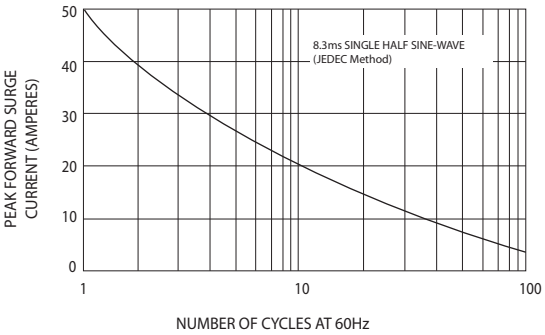


FIG.4-TYPICAL REVERSE CHARACTERISTICS

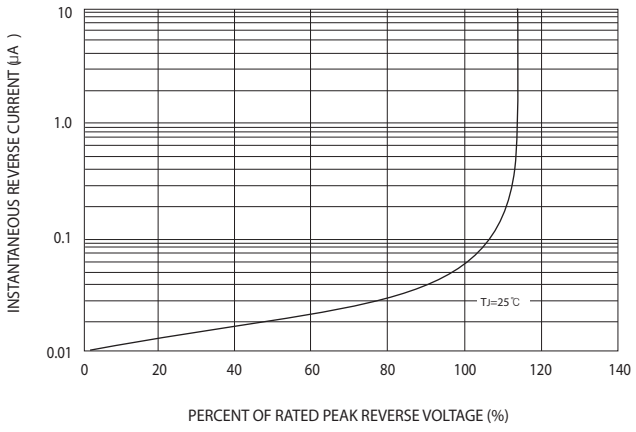


FIG.5-TYPICAL JUNCTION CAPACITANCE