

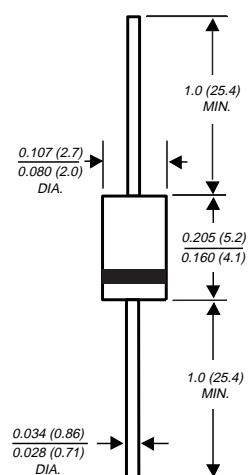
1N5391 THRU 1N5399

GENERAL PURPOSE PLASTIC RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current - 1.5 Amperes

DO-204AL



Dimensions in inches and (millimeters)

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ High surge current capability
- ◆ 1.5 Ampere operation at $T_L=70^\circ\text{C}$ with no thermal runaway
- ◆ Low reverse leakage
- ◆ Construction utilizes void-free molded plastic technique
- ◆ High temperature soldering guaranteed: $250^\circ\text{C}/10$ seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension



MECHANICAL DATA

Case: JEDEC DO-204AL molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.012 ounce, 0.3 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	1N 5391	1N 5392	1N 5393	1N 5394	1N 5395	1N 5396	1N 5397	1N 5398	1N 5399	UNITS
*Maximum repetitive 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 0.500" (12.7mm) lead length at $T_L=70^\circ\text{C}$	I _(AV)										Amps
*Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at $T_A=75^\circ\text{C}$	I _{FSM}										Amps
*Maximum instantaneous forward voltage at 1.5A $T_A=70^\circ\text{C}$	V _F										Volts
*Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=150^\circ\text{C}$	I _R										μA
*Maximum full load reverse current full cycle average, 0.375", (9.5mm) lead length at $T_L=70^\circ\text{C}$	I _{R(AV)}										μA
Typical reverse recovery time (NOTE 1)	t _{rr}										μs
Typical junction capacitance (NOTE 2)	C _J										pF
Typical thermal resistance (NOTE 3)	R _{θJA} R _{θJL}										°C/W
*Maximum DC blocking voltage temperature	T _A										°C
*Operating junction temperature range	T _J										°C
*Storage temperature range	T _{STG}										°C

NOTES:

(1) Measured with I_F=0.5A, I_R=0.1A, I_{rr}= 0.25A

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

(3) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, P.C.B. mounted

*JEDEC registered value

RATINGS AND CHARACTERISTIC CURVES 1N5391 THRU 1N5399

