



T.01-15

1.5 AMP GENERAL PURPOSE SILICON DIODES

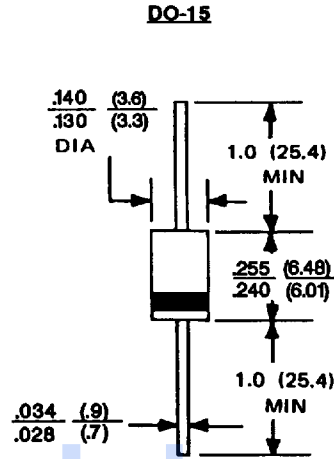
FEATURES:

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Chlorothene & similar solvents
- The plastic material carries U/L recognition 94V-O

VOLTAGE RANGE
50 to 1000 Volts
CURRENT
1.5 Amps

MECHANICAL DATA

- Case: JEDEC DO-15, molded plastic
- Terminals: Plated axial leads, solderable per MIL-STD-202, method 208
- Mounting Position: Any
- Polarity: Color band denotes cathode end
- Weight: 0.4 grams



Dimensions in inches & (millimeters)

Datasheet.Live

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

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

MAXIMUM RATING @ T _A =25°C (unless otherwise specified)	SYMBOL								UNITS
		1N5391	1N5392	1N5393	1N5395	1N5397	1N5398	1N5399	
Series Number		1N5391	1N5392	1N5393	1N5395	1N5397	1N5398	1N5399	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	
Maximum Average Forward Rectified Current 0.375 in. (9.5mm) Lead Length @ T _A = 50°C	I _(AV)	1.5							Amps
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC method)	I _{FSM}	60							Amps
Maximum Instantaneous Forward Voltage at 1.5 Amps	V _F	1							Volts
Maximum DC Reverse Current @: T _A = 25°C at Rated DC Blocking Voltage T _A = 100°C	I _R	5 50							μA
Maximum Full Load Reverse Current Full Cycle Average 0.375 in. (9.5 mm) Lead Length @ T _L = 75°C		30							μA
Typical Junction Capacitance (Note 1)	C _J	30							pf
Typical Thermal Resistance R _{θJA} (Note 2)	R _{θJC}	50							°C/W
Operating & Storage Temperature Range	T _J , T _{STG}	-65 to +175							°C

NOTES: (1) Measured at 1MHz & applied reverse voltage of 4V DC.
(2) Thermal resistance from junction ambient 0.375 in. (9.5mm) lead length.



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RATING & CHARACTERISTIC CURVES (1N5391-5399)

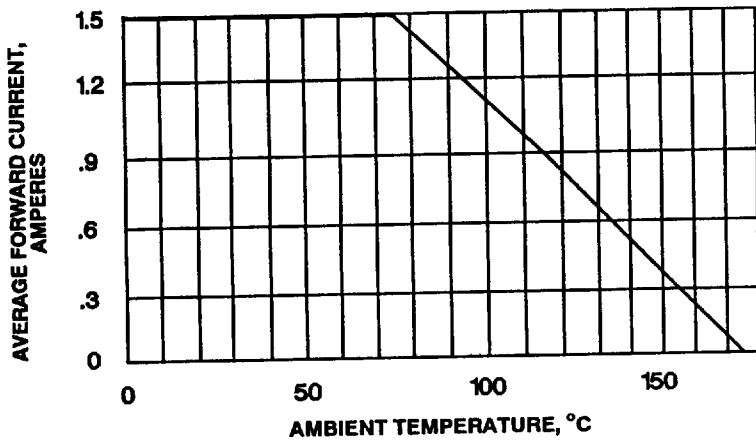


Fig. 1: Typical forward current derating curve.

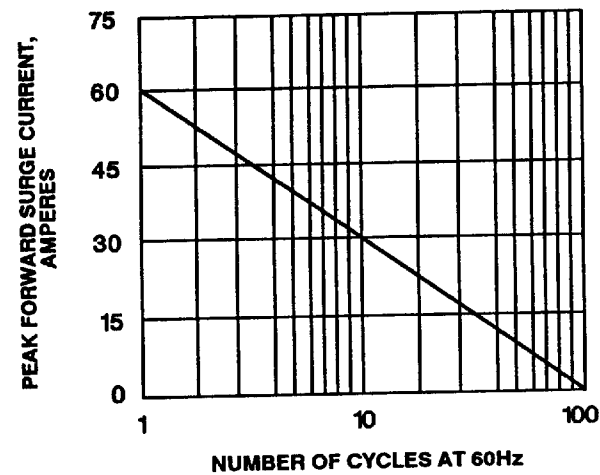


Fig. 3: Maximum non-repetitive forward surge current.

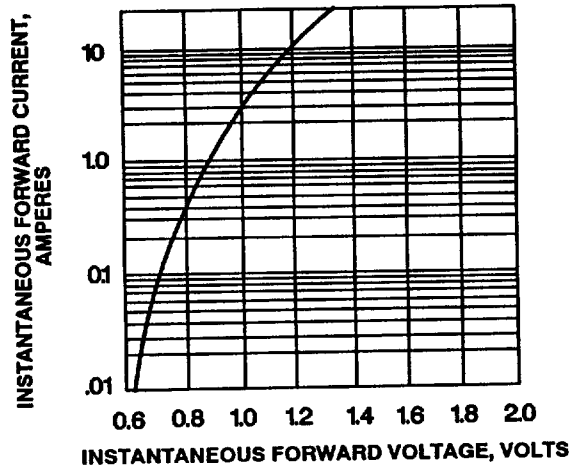


Fig. 2: Typical instantaneous forward characteristics.

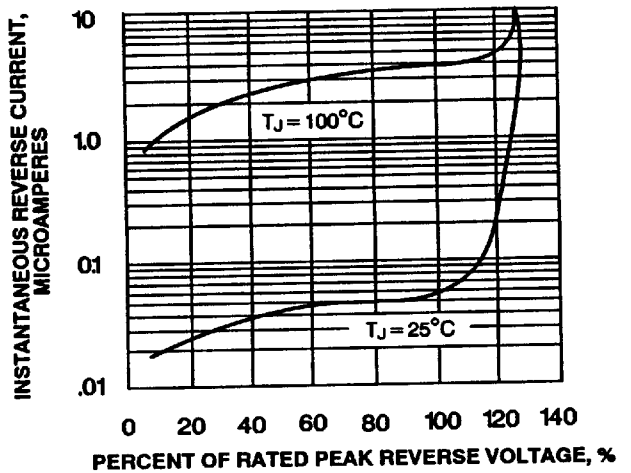


Fig. 4: Typical reverse characteristics.

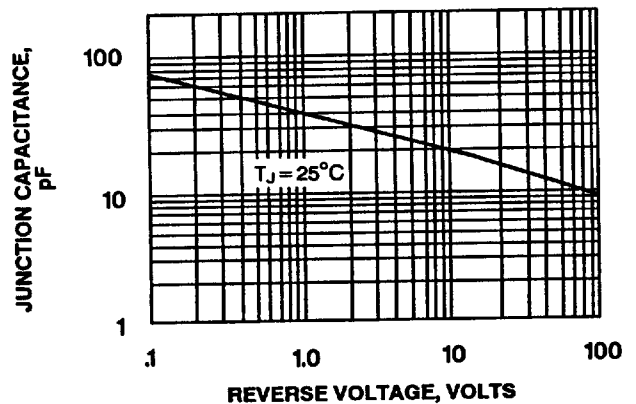


Fig. 5: Typical junction capacitance.