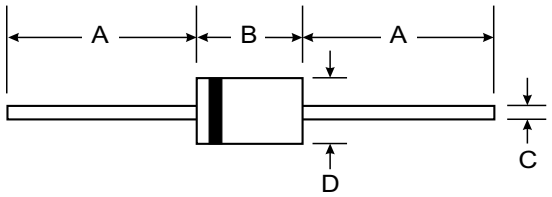
1N5391/S - 1N5399/S

1.5A RECTIFIER

Features

- Diffused Junction
- Fast Switching for High Efficiency
- High Current Capability and Low Forward Voltage Drop
- Low Reverse Leakage Current
- Surge Overload Rating to 50A Peak
- Plastic Material - UL Flammability Classification Rating 94V-0



	DO-41 Plastic		DO-15	
Dim	**Min**	**Max**	**Min**	**Max**
A	25.40	—	25.40	—
B	4.06	5.21	5.50	7.62
C	0.71	0.864	0.686	0.889
D	2.00	2.72	2.60	3.60
All Dimensions in mm				

"S" Suffix Designates DO-41 Package
No Suffix Designates DO-15 Package

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: DO-41 0.30 grams (approx.)
  DO-15 0.40 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	1N 5391/S	1N 5392/S	1N 5393/S	1N 5395/S	1N 5397/S	1N 5398/S	1N 5399/S	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ T_A = 70°C	I_O	1.5							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							A
Forward Voltage Drop @ I_F = 1.5A	V_{FM}	1.1							V
Peak Reverse Leakage Current @ T_A = 25°C at Rated DC Blocking Voltage @ T_A = 100°C	I_{RM}	5.0 50							μA
Typical Junction Capacitance (Note 2)	C_j	20							pF
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$	25							K/W
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	55							K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150							°C

Notes: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
2. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V DC.

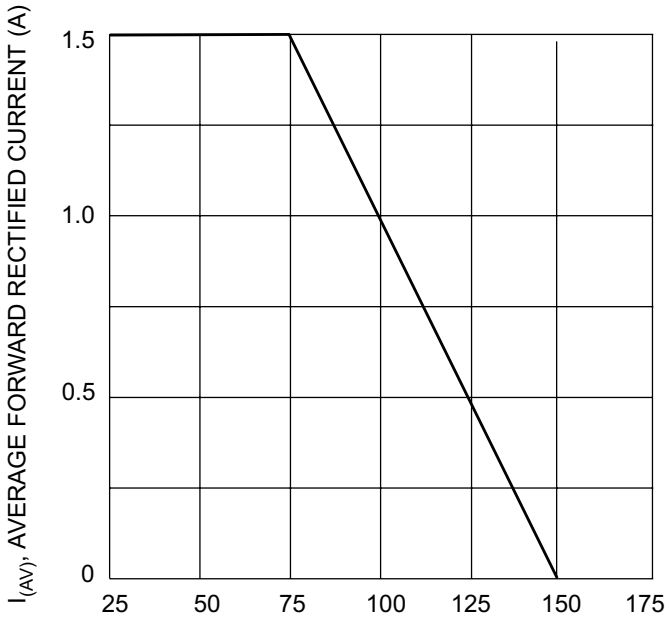


Fig. 1, Forward Current Derating Curve

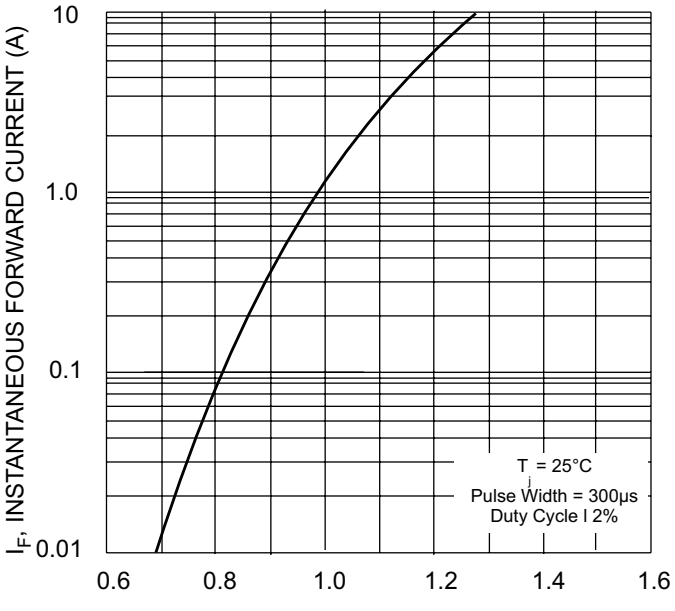


Fig. 2 Typical Forward Characteristics

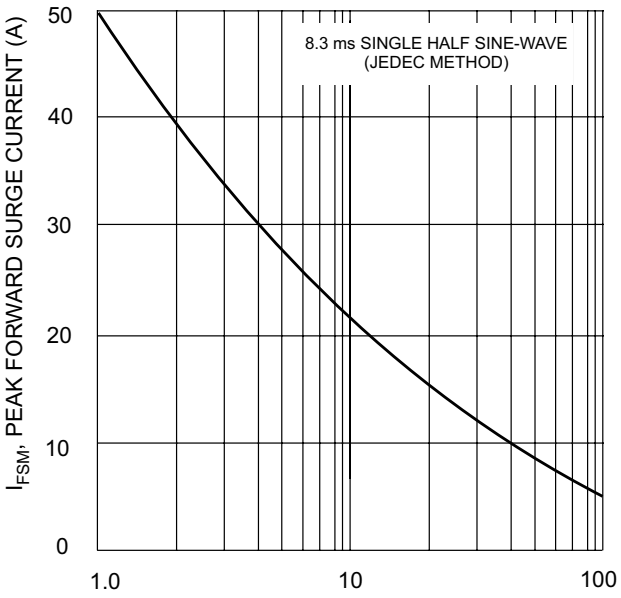


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

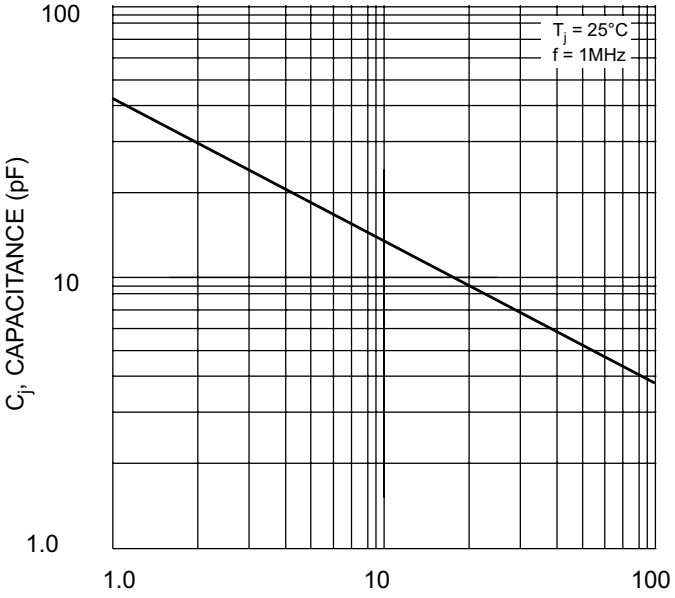


Fig. 4 Typical Junction Capacitance