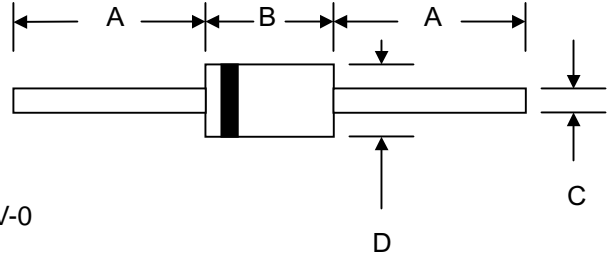


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Features

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



Mechanical Data

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

DO-41				
Dim	Min	Max	Min	Max
A	25.4	—	1.000	—
B	4.06	5.21	0.159	0.205
C	0.71	0.864	0.028	0.034
D	2.00	2.72	0.079	0.107
	In mm		In inch	

Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

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

Characteristic	Symbol	1N5391S	1N5392S	1N5393S	1N5395S	1N5397S	1N5398S	1N5399S	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ $T_A = 70^{\circ}\text{C}$	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 @ $I_F = 1.5\text{A}$	V_{FM}	1.1							V
Peak Reverse Current @ $T_A = 25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^{\circ}\text{C}$	I_{RM}	5.0 50							μA
Typical Junction Capacitance (Note 2)	C_j	20							pF
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	55							K/W
Operating Temperature Range	T_j	-65 to +150							$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150							$^{\circ}\text{C}$

***Glass passivated forms are available upon request**

- Note: 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 D.C.

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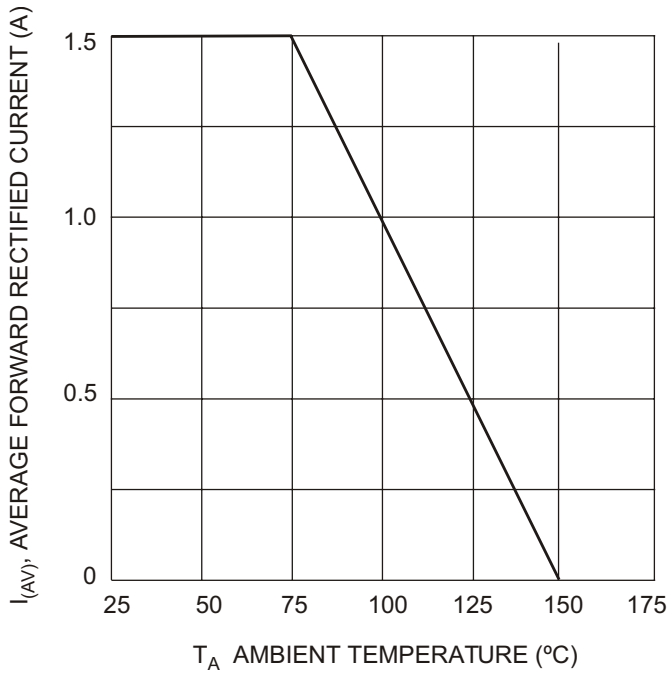


Fig. 1, Forward Current Derating Curve

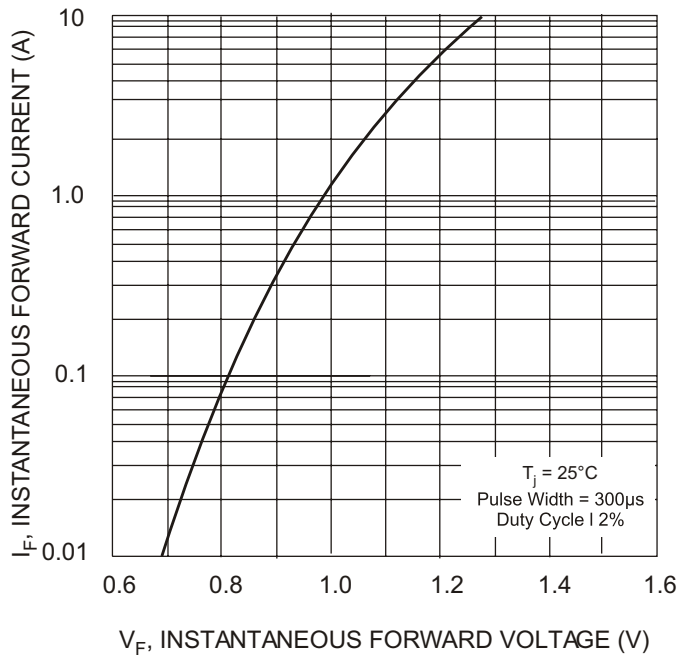


Fig. 2 Typical Forward Characteristics

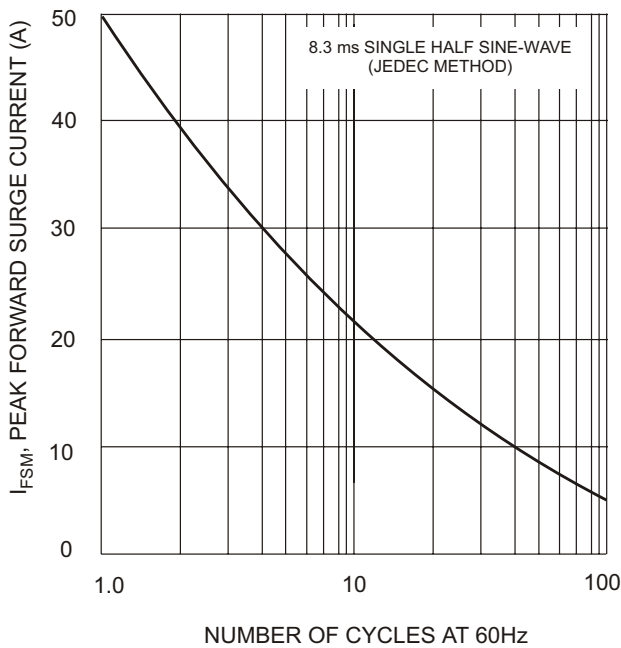


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

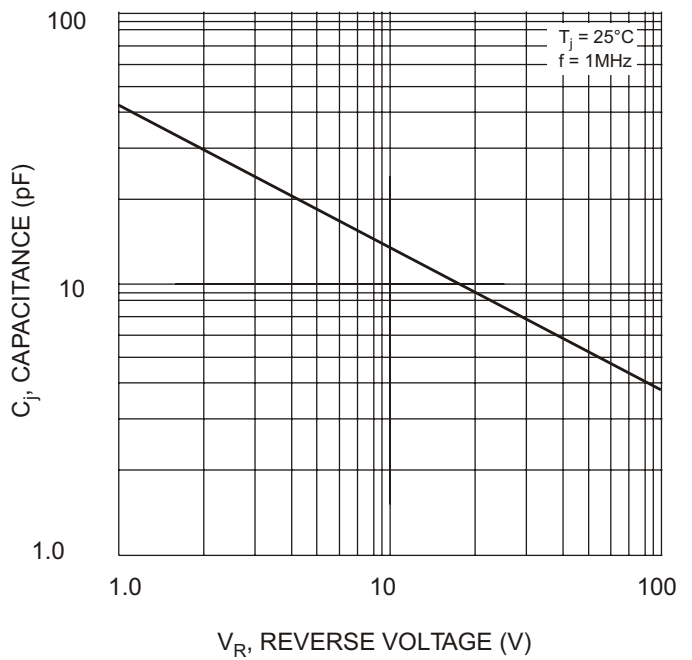


Fig. 4 Typical Junction Capacitance

TECHNICAL DATA

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