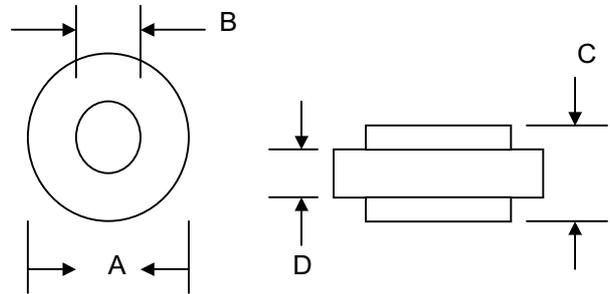


**Data Sheet 2500 Rev.—**

**Features**

- Diffused Junction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Low Cost Construction Utilizing Void-Free Molded Plastic Technique



**Mechanical Data**

- Case: Molded Plastic
- Terminals: Plated Terminals Solderable per MIL-STD-202, Method 208
- Polarity: Color Ring Denotes Cathode End
- Weight: 1.8 grams (approx.)
- Mounting Position: Any
- Marking: Color Band

Dim	AR		ARS	
	Min	Max	Min	Max
A	0.382(9.70)	0.409(10.4)	0.327(8.30)	0.350(8.90)
B	0.217(5.50)	0.224(5.70)	0.217(5.50)	0.224(5.70)
C	0.236(6.00)	0.252(6.40)	0.236(6.00)	0.252(6.40)
D	0.165(4.20)	0.185(4.70)	0.165(4.20)	0.185(4.70)

All Dimensions in inch(mm)

S Suffix Designates ARS Package  
No Suffix Designates AR Package

**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	AR/S 25A	AR/S 25B	AR/S 25D	AR/S 25G	AR/S 25J	AR/S 25K	AR/S 25M	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 @ $T_C = 150^\circ\text{C}$	$I_o$	25							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) at $T_J = 150^\circ\text{C}$	$I_{FSM}$	400							A
Forward Voltage @ $I_F = 25\text{A}$	$V_{FM}$	1.0							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_{RM}$	5.0 250							$\mu\text{A}$
Reverse Recovery Time (Note 1)	$t_{rr}$	3.0							$\mu\text{S}$
Typical Junction Capacitance (Note 2)	$C_j$	300							pF
Typical Thermal Resistance Junction to Case (Note 3)	$R_{\theta JC}$	1.0							K/W
Operating and Storage Temperature Range	$T_J, T_{STG}$	-50 to +175							$^\circ\text{C}$
Polarity and Voltage Denotation Color Band		Red	Yellow	Silver	Orange	Green	Blue	Violet	

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

- Note: 1. Measured with  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{RR} = 0.25\text{A}$   
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
3. Thermal Resistance: Junction to case, single side cooled.

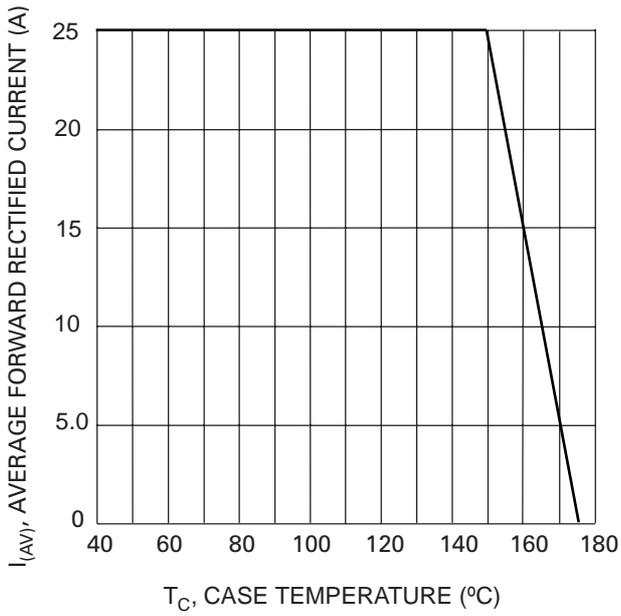


Fig. 1 Forward Current Derating Curve

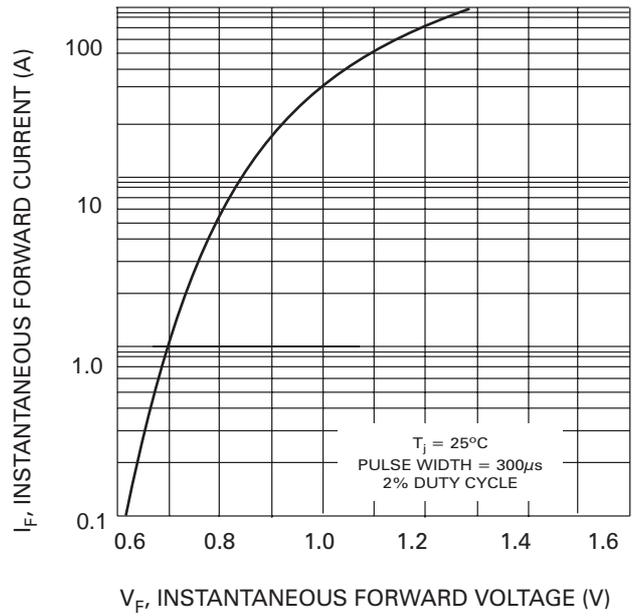


Fig. 2 Typical Forward Characteristics

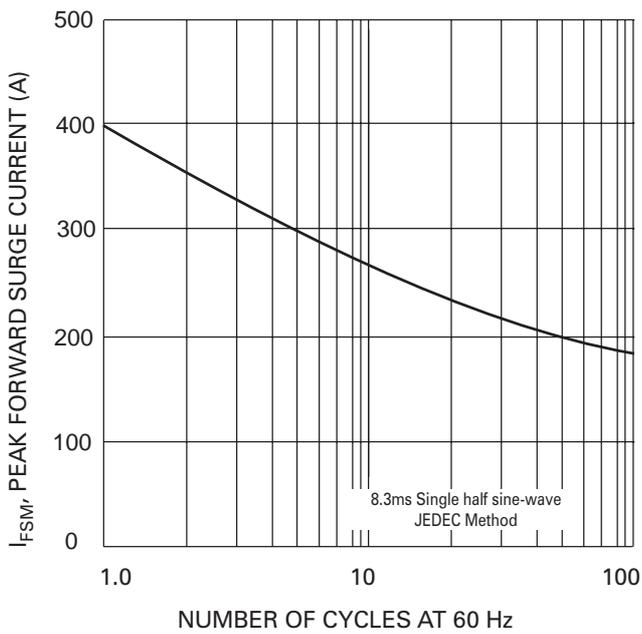


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

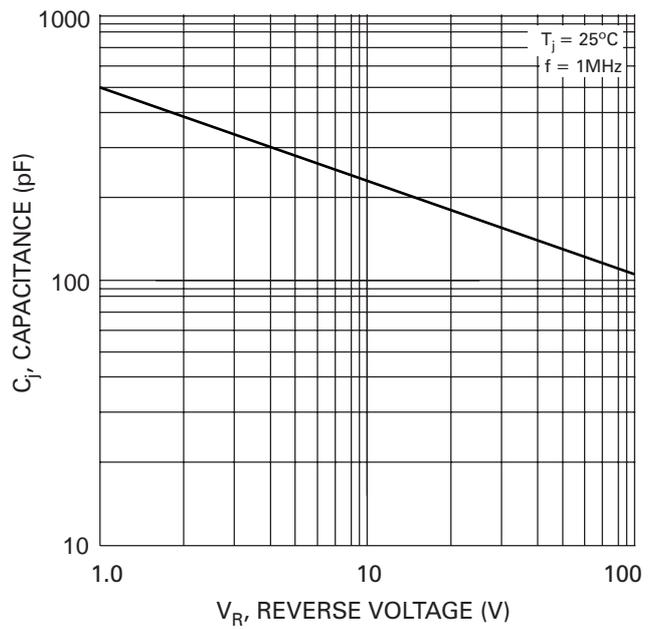


Fig. 4 Typical Junction Capacitance