

**R2500F  
THRU  
R3000F**

**Features**

- Low Cost
- Low Leakage
- Low Forward Voltage Drop
- High Current Capability
- High Voltage
- Fast Switching For Higher Efficiency

**200 Milliamp High  
Voltage Fast Recovery  
Silicon Rectifier  
2500 to 3000 Volts**

**Maximum Ratings**

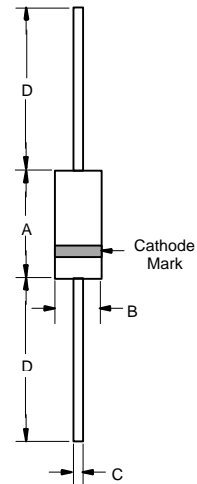
- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C

Microsemi Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
R2500	---	2500V	1750V	2500V
R3000	---	3000V	2100V	3000V

**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Forward Current	$I_{F(AV)}$	200mA	$T_A = 50^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	2.6V	$I_{FM} = 0.2\text{A}; T_A = 50^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0µA 50µA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Typical Junction Capacitance	$C_J$	30pF	Measured at 1.0MHz, $V_R=4.0\text{V}$
Maximum Reverse Recovery Time	$T_{rr}$	500nS	

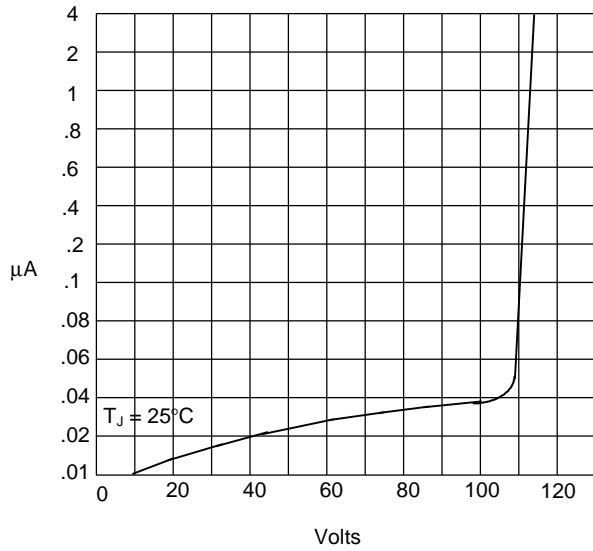
**DO-15**



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.230	.300	5.80	7.60	
B	.104	.140	2.60	3.60	
C	.026	.034	.70	.90	
D	1.000	---	25.40	---	

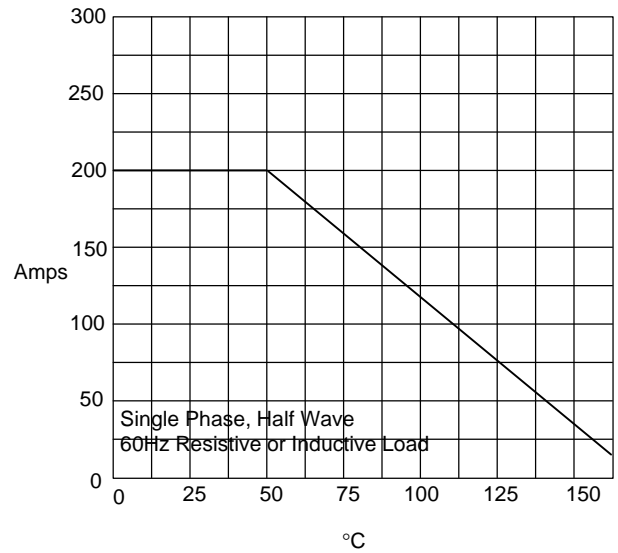
# R2500F - R3000F

Figure 1  
Typical Reverse Characteristics



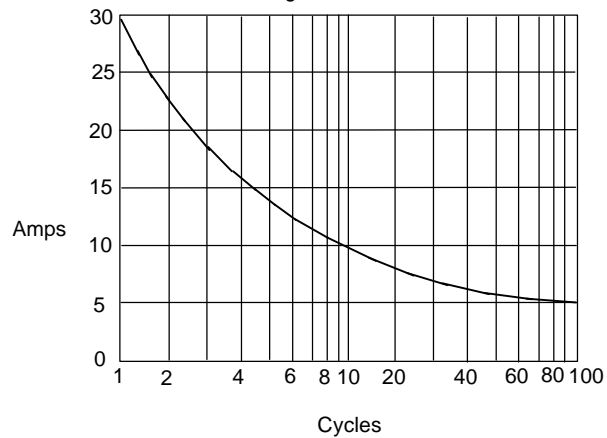
Instantaneous Reverse Current - Micro Amperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus  
Ambient Temperature -  $^\circ C$

Figure 3  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus  
Number Of Cycles At 60Hz - Cycles