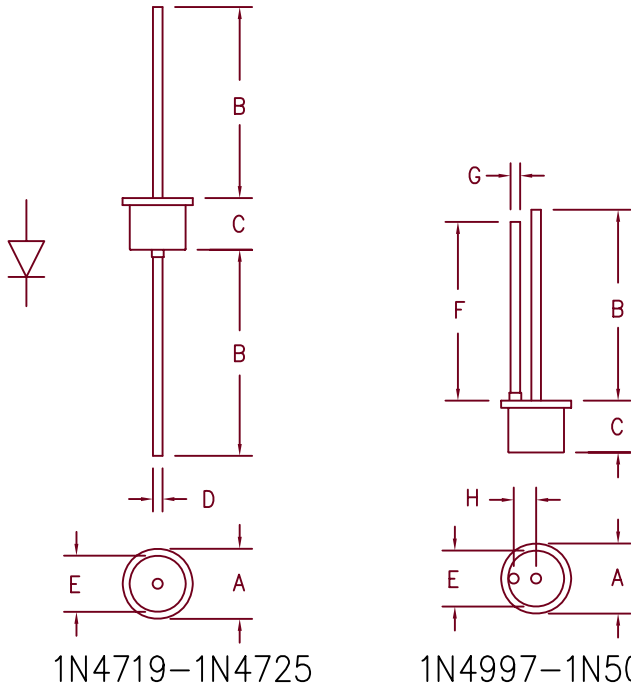


# Silicon Rectifiers

## 1N4719–1N4725, 1N4997–1N5003



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	---	.450	---	11.43	Dia.
B	.980	---	24.89	---	
C	---	.300	---	7.62	
D	.046	.056	1.17	1.42	Dia.
E	---	.350	---	8.89	Dia.
F	.960	---	24.38	---	
G	.031	.035	.79	.89	Dia.
H	.145	.165	3.68	4.19	

1N4719–1N4725

1N4997–1N5003

Microsemi  
Catalog Number

1N4719, 1N4997  
1N4720, 1N4998  
1N4721, 1N4999  
1N4722, 1N5000  
1N4723, 1N5001  
1N4724, 1N5002  
1N4725, 1N5003

Peak Reverse  
Voltage

50V  
100V  
200V  
400V  
600V  
800V  
1000V

- High Surge Capability
- 175°C Junction Temperature
- VRRM 50 to 1000 Volts
- 3 Amp Current Rating
- Hermetically Sealed

### Electrical Characteristics

Average forward current  
Maximum surge current  
Max peak forward voltage  
Max peak reverse current

$I_F(AV)$  3.0 Amps  
 $I_{FSM}$  300 Amps  
 $V_{FM}$  1.0 Volts  
 $I_{RM}$  25  $\mu$ A

$T_A = 119^\circ\text{C}$ , Square wave,  $R_{\theta JL} = 12^\circ\text{C/W}$ ,  $L = 1/4"$   
8.3ms, half sine,  $T_J = 175^\circ\text{C}$   
 $I_{FM} = 3.0\text{A}$ ;  $T_J = 25^\circ\text{C}^*$   
 $V_{RRM}, T_J = 25^\circ\text{C}$

\*Pulse test: Pulse width 300  $\mu$ sec, Duty cycle 2%

### Thermal and Mechanical Characteristics

Storage temperature range  
Operating junction temp range  
Maximum thermal resistance  
Weight

$T_{STG}$   
 $T_J$   
 $L = 1/4"$   $R_{\theta JL}$

$-65^\circ\text{C}$  to  $175^\circ\text{C}$   
 $-65^\circ\text{C}$  to  $175^\circ\text{C}$   
 $12^\circ\text{C/W}$  Junction to Lead  
.08 ounces (2.3 grams) typical



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05-01-07 Rev. 3

# 1N4719-1N4725, 1N4997-1N5003

Figure 1  
Typical Forward Characteristics

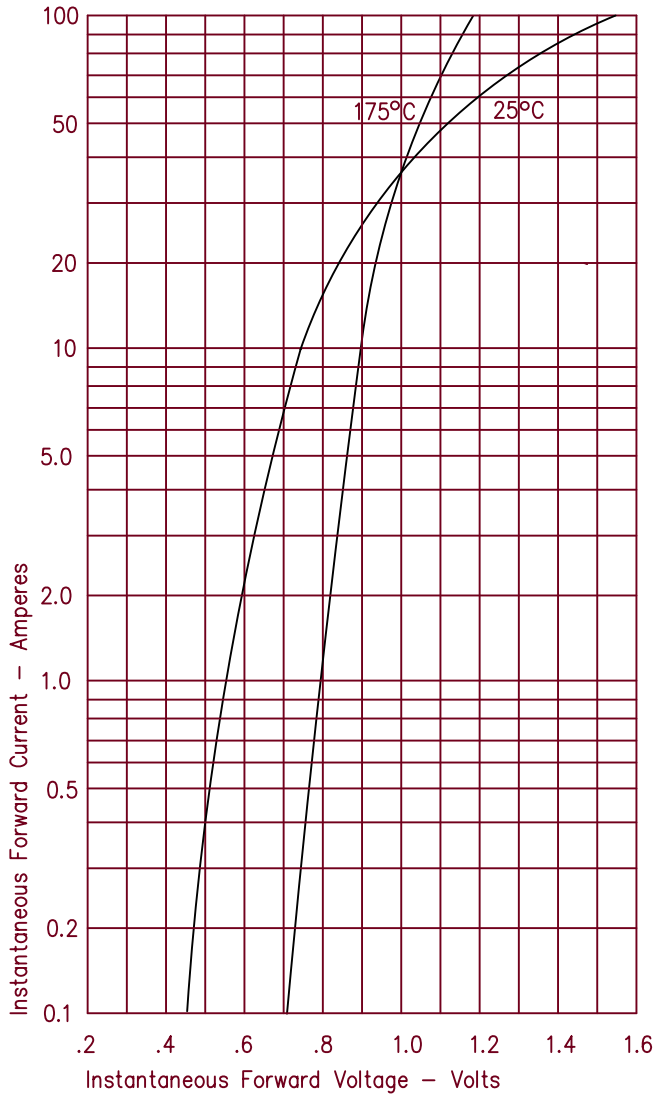


Figure 3  
Forward Current Derating

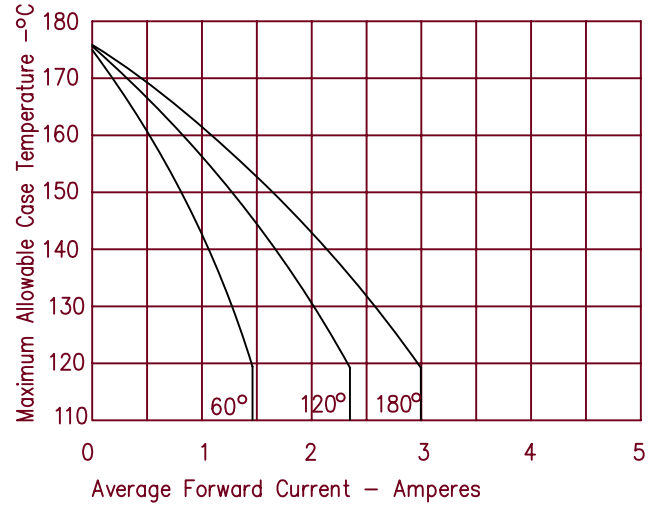


Figure 2  
Typical Reverse Characteristics

