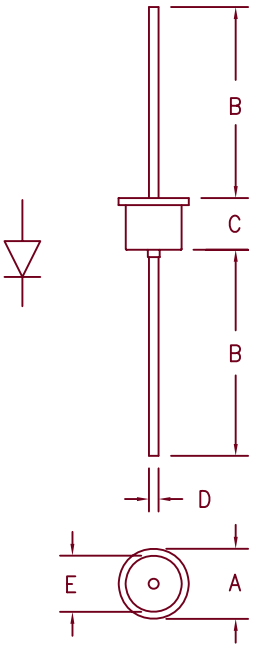
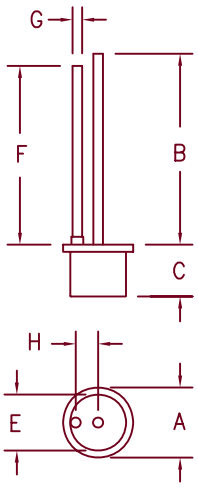
Silicon Rectifiers

1N4719–1N4725,1N4997–1N5003



1N4719–1N4725



1N4997–1N5003

Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
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	

Microsemi Catalog Number	Peak Reverse Voltage
1N4719, 1N4997	50V
1N4720, 1N4998	100V
1N4721, 1N4999	200V
1N4722, 1N5000	400V
1N4723, 1N5001	600V
1N4724, 1N5002	800V
1N4725, 1N5003	1000V

- High Surge Capability
- 175°C Junction Temperature
- V_{RRM} 50 to 1000 Volts
- 3 Amp Current Rating
- Hermetically Sealed

Electrical Characteristics

Average forward current	$I_{F(AV)}$ 3.0 Amps	T_A = 119°C, Square wave, $R_{\theta JL}$ = 12°C/W, L = 1/4"
Maximum surge current	I_{FSM} 300 Amps	8.3ms, half sine, T_J = 175°C
Max peak forward voltage	V_{FM} 1.0 Volts	I_{FM} = 3.0A; T_J = 25°C*
Max peak reverse current	I_{RM} 25 µA	V_{RRM}, T_J = 25°C

*Pulse test: Pulse width 300 µsec, Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temperature range	T_{STG}	−65°C to 175°C
Operating junction temp range	T_J	−65°C to 175°C
Maximum thermal resistance	L = 1/4" $R_{\theta JL}$	12°C/W Junction to Lead
Weight		.08 ounces (2.3 grams) typical

LAWRENCE Microsemi

6 Lake Street
Lawrence, MA 01841
PH: (978) 620-2600
FAX: (978) 689-0803
www.microsemi.com

05-01-07 Rev. 3

1N4719–1N4725, 1N4997–1N5003

Figure 1
Typical Forward Characteristics

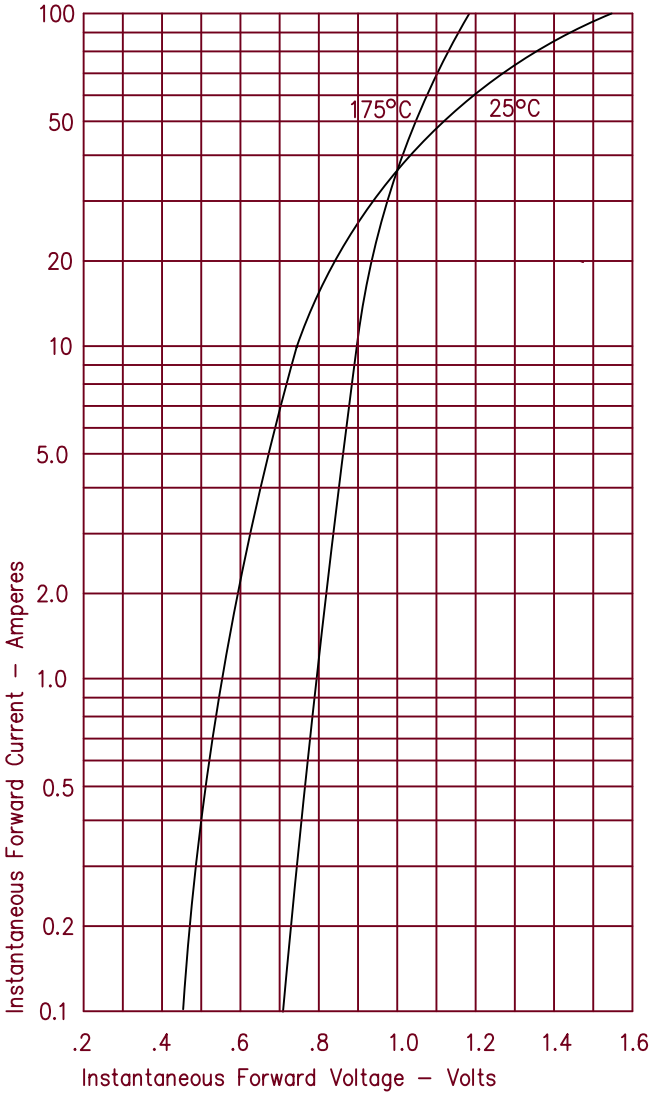


Figure 2
Typical Reverse Characteristics

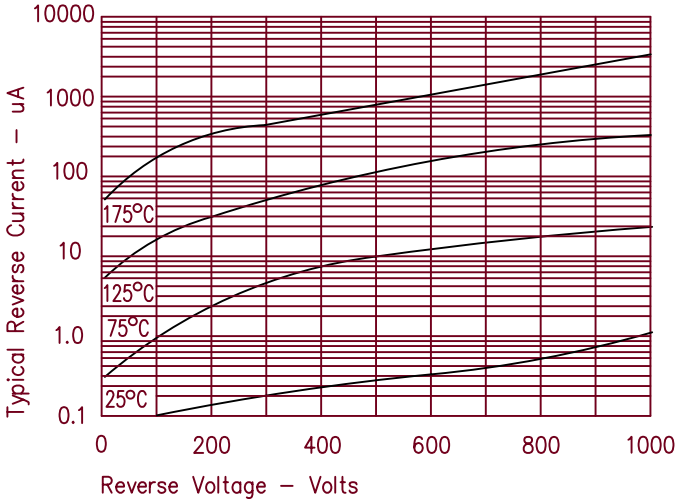
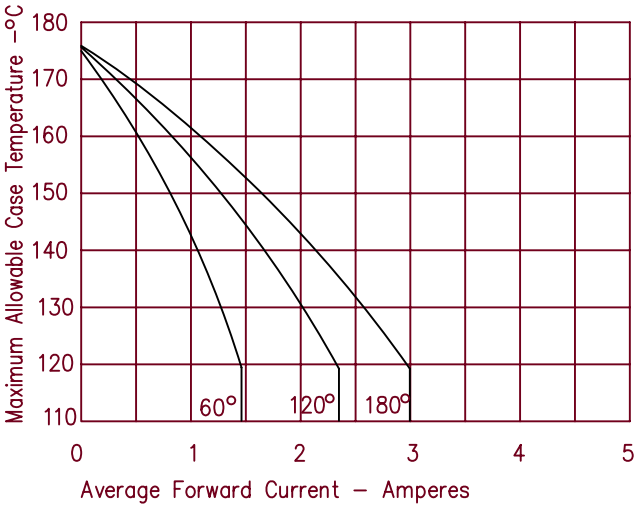



Figure 3
Forward Current Derating