

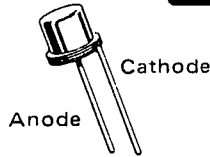
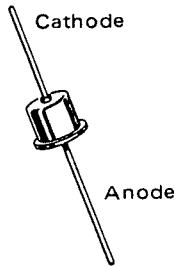
**1N4719 thru 1N4725 (SILICON)**  
**1N4997 thru 1N5003**



**SOLID STATE INC.**

46 FARRAND STREET  
 BLOOMFIELD, NEW JERSEY 07003

www.solidstateinc.com



1N4719 THRU 1N4725

1N4997 thru 1N5003

Silicon high-conductance rectifiers available in either axial-lead or single-ended packages. Type numbers shown have cathode connected to case. For anode-to-case connection, add suffix "R" to type number, i. e. 1N4719R

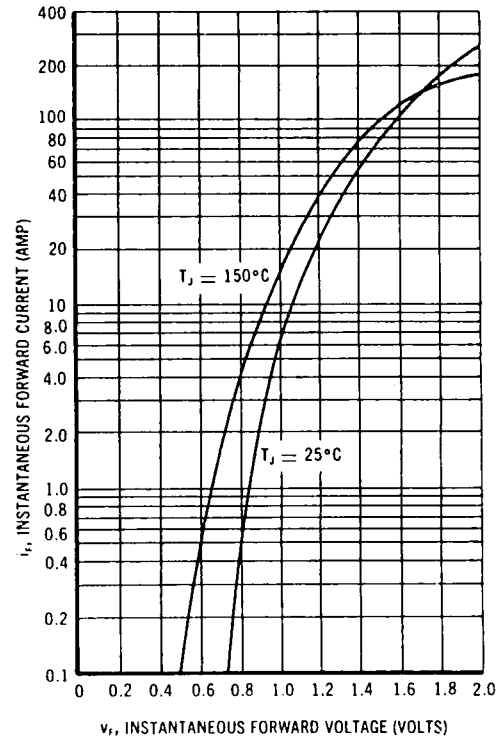
**MAXIMUM RATINGS** (Both Package Types)  $T_A = 25^{\circ}\text{C}$  unless otherwise noted.

Rating	Symbol	1N	1N	1N	1N	1N	1N	1N	Unit
		4719	4720	4721	4722	4723	4724	4725	
		1N	1N	1N	1N	1N	1N	1N	
		4997	4998	4999	5000	5001	5002	5003	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	50	100	200	400	600	800	1000	Volts
Non-Repetitive Peak Reverse Voltage (one half-wave, single phase, 60 cycle peak)	$V_{RSM}$	100	200	300	500	720	1000	1200	Volts
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	Volts
Average Rectified Forward Current (single phase, resistive load, 60 Hz, $T_A = 75^{\circ}\text{C}$ ) see figure 4	$I_O$	3.0							Amp
Peak Repetitive Forward Current ( $T_A = 75^{\circ}\text{C}$ )	$I_{FRM}$	25							Amp
Non-Repetitive Peak Surge Current (superimposed on rated current at rated voltage, $T_A = 75^{\circ}\text{C}$ ) see figure 1	$I_{FSM}$	300 (for 1/2 cycle)							Amp
$I^2t$ Rating (non-repetitive, 1 ms < t < 8.3 ms)	$I^2t$	185							$A_{(rms)}^2s$
Operating and Case Temperature	$T_J, T_{stg}$	-65 to +175							$^{\circ}\text{C}$
Thermal Resistance, Junction to Case (note 1)	$R_{\theta JA}$	30							$^{\circ}\text{C/W}$

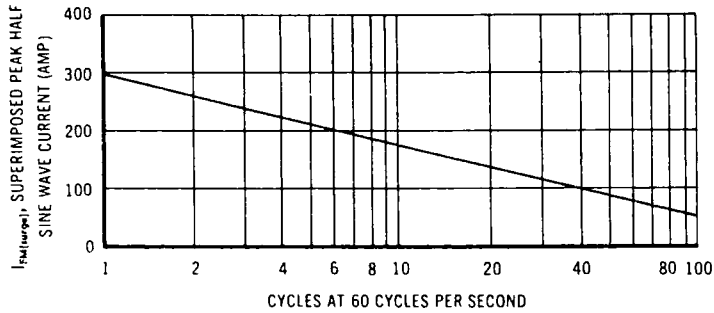
ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Max Limit	Unit
Instantaneous Forward Voltage ( $i_F = 9.4 \text{ A}$ , $T_J = 175^\circ\text{C}$ , Half Wave Rectifier)	$V_F$	1.0	Volts
Full Cycle Average Reverse Current ( $I_O = 3.0 \text{ Amps}$ and Rated $V_R$ , $T_A = 75^\circ\text{C}$ , Half Wave Rectifier)	$I_{R(AV)}$	1.5	mA
DC Reverse Current (Rated $V_R$ , $T_A = 25^\circ\text{C}$ )	$I_R$	0.5	mA

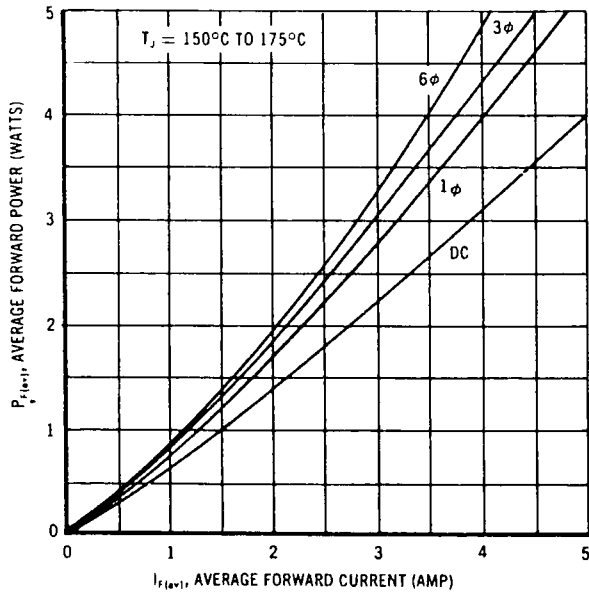
FORWARD VOLTAGE CHARACTERISTICS



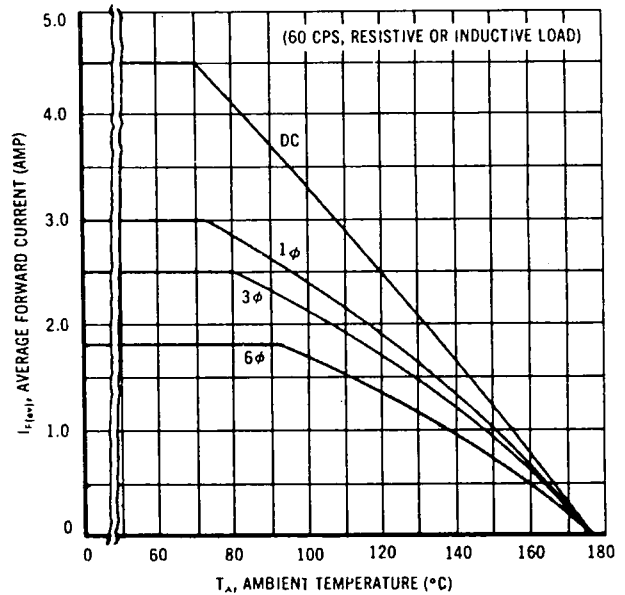
MAXIMUM SURGE CURRENT  $T_A = 75^\circ\text{C}$



MAXIMUM FORWARD POWER DISSIPATION versus AVERAGE FORWARD CURRENT



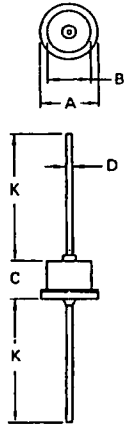
MAXIMUM FORWARD CURRENT versus AMBIENT TEMPERATURE



1N4719 thru 1N4725, 1N4997 thru 1N5003

OUTLINE DIMENSIONS

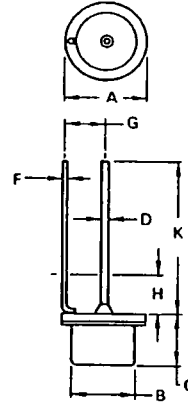
A179



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	-	11.43	-	0.450
B	-	8.89	-	0.350
C	-	7.62	-	0.300
D	1.17	1.42	0.046	0.056
K	24.89	-	0.980	-

1N4719 thru 1N4725

M176



NOTE:  
1. DIM "G" CONTROLLED  
WITHIN ZONE "H".

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	10.16	12.70	0.400	0.500
B	7.62	8.89	0.300	0.350
C	6.60	8.89	0.260	0.350
D	1.17	1.42	0.046	0.056
F	0.69	0.94	0.027	0.037
G	4.19	4.95	0.165	0.195
H	3.05	3.30	0.120	0.130
K	22.86	-	0.900	-

1N4997 thru 1N5003