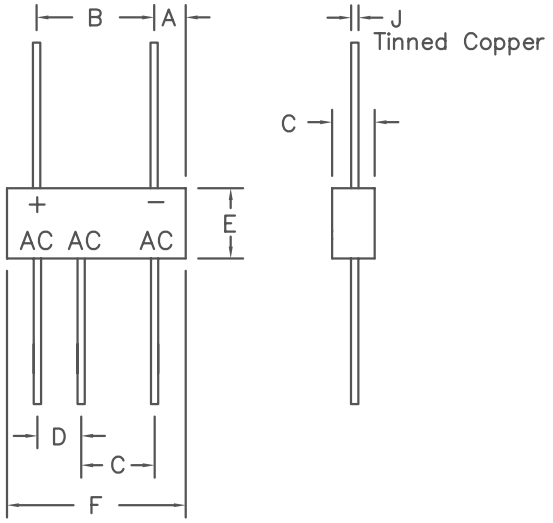
Three Phase Bridges
Standard and Fast Recovery
700 & 701 Series



Dim.	Inches	Millimeter
A	.198	5.03
B	.621	15.77
C	.365	9.27
D	.255	6.48
E	.465 MAX.	11.81 MAX.
F	1.030 MAX.	26.16 MAX.
G	.220 MAX.	5.59 MAX.
H	.875 MIN.	22.23 MIN.
J	.028 DIA.	0.71 DIA.

MARKING:
Alternating Current Input: AC
Cathode Positive Output: +
Anode Negative: −
Part number is printed on the body.

Microsemi Catalog Number Standard Recovery	Microsemi Catalog Number Fast Recovery	Working Peak Reverse Voltage V_{RRM}
700−1	701−1	100V
700−2	701−2	200V
700−3	701−3	300V
700−4	701−4	400V
700−5	701−5	500V
700−6	701−6	600V

- Current ratings to 2.5A
- V_{RRM} 600 Volts
- Only fused−in−glass diodes used
- 150°C junction temperature
- Surge ratings to 25A
- Recovery times to 500nS
- Controlled avalanche characteristics
- MIL−PRF−19500 Similarity
- Sn/Pb terminations

Electrical Characteristics

		700	701
Maximum DC output current−T_A = 25°C	I_O	2.5A	2.25A
Maximum surge current	I_{FSM}	25A	20A
Max peak forward voltage per leg @ 25°C	V_{FM}	1.0V @ 0.5A*	1.1V @ 0.5A*
Max peak reverse current @ 25°C, at Vrrm	I_{RM}	2uA	2uA
Max peak reverse current @ 100°C, at Vrrm	I_{RM}	100uA	100uA
Max. recovery time 10mA, 10mA, 5mA	t_{rr}	---	500nS

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

Thermal and Mechanical Characteristics

Storage temp range	T_{STG}	−65°C to 150°C
Operating junction temp range	T_J	−65°C to 150°C
Max thermal resistance junction to ambient	$R_{\Theta JA}$	25°C/W
Weight−typical		3.5 grams

4−11−05 Rev. 3

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700 & 701

Figure 1
Typical Forward Characteristics – Per Leg
700 Series

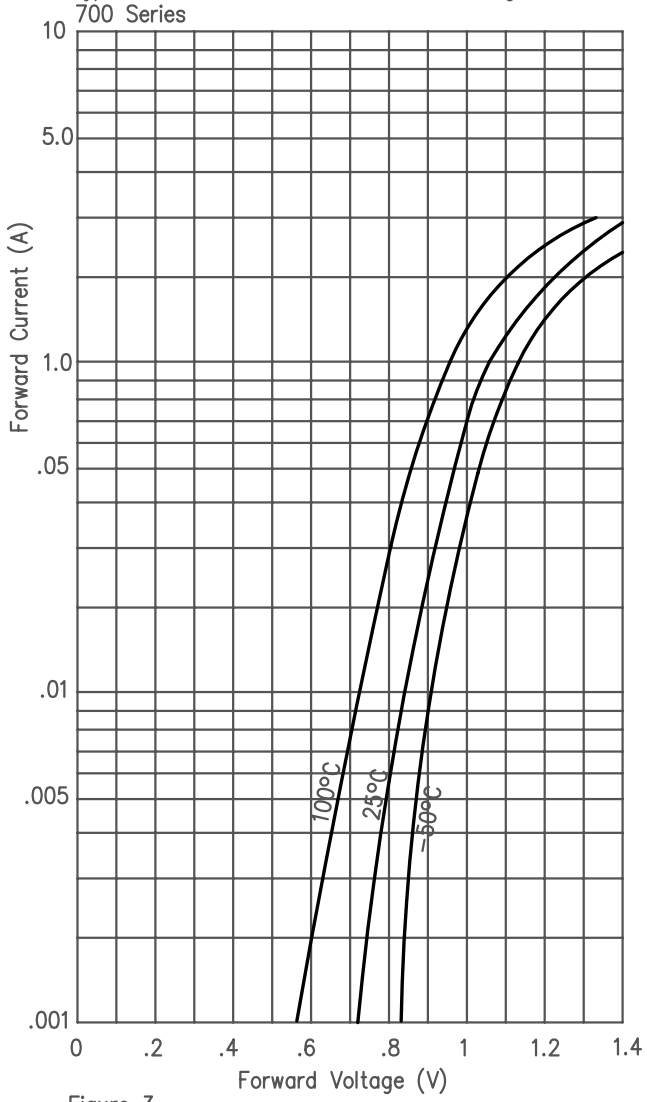


Figure 2
Typical Forward Characteristics – Per Leg
701 Series

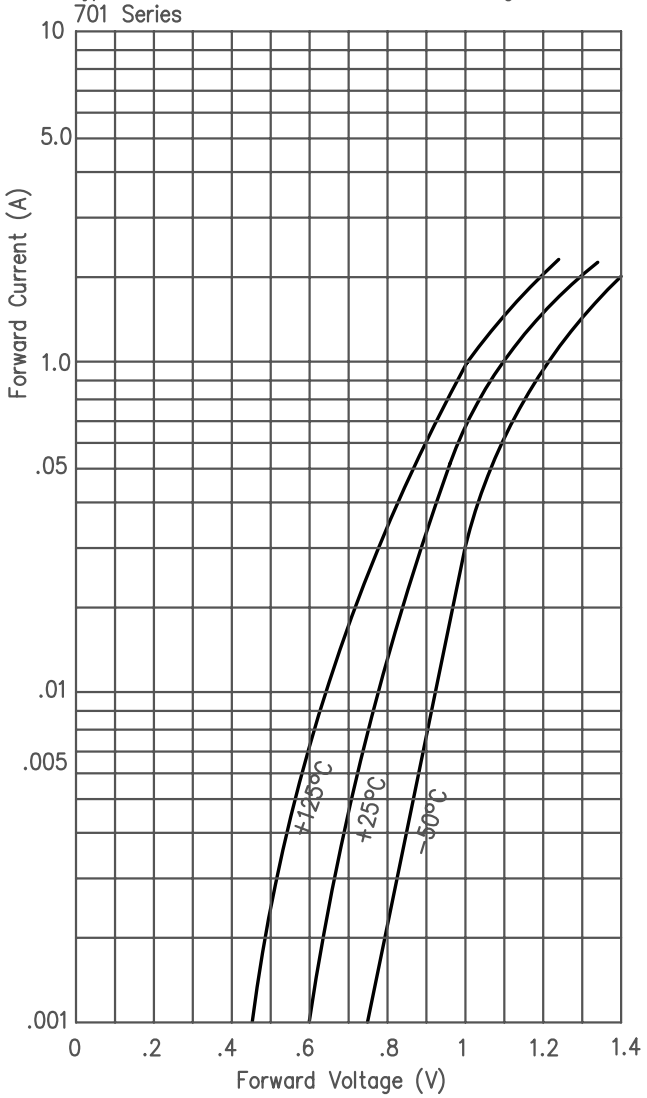


Figure 3
Typical Leakage Current – Per Leg

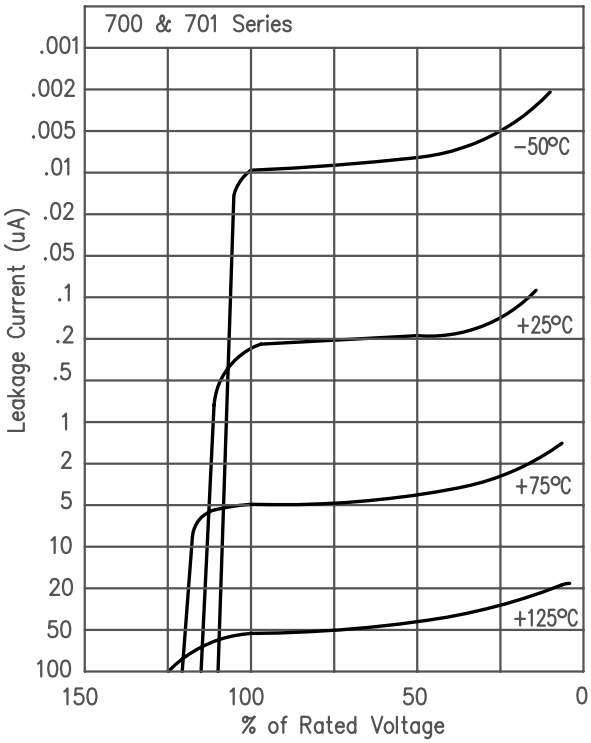
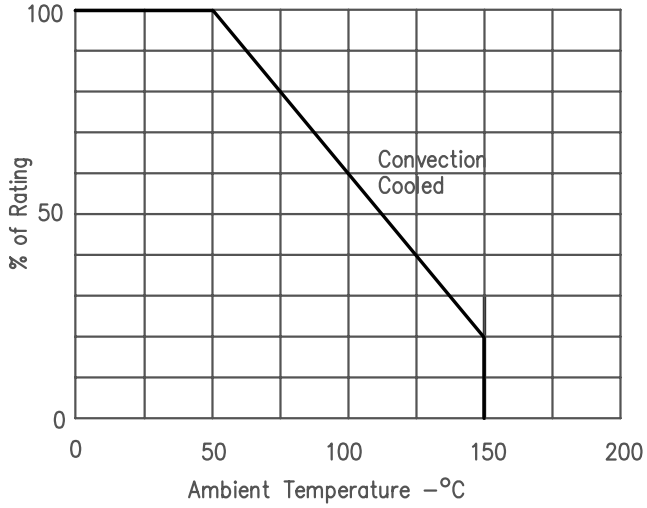


Figure 4
Current Derating



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