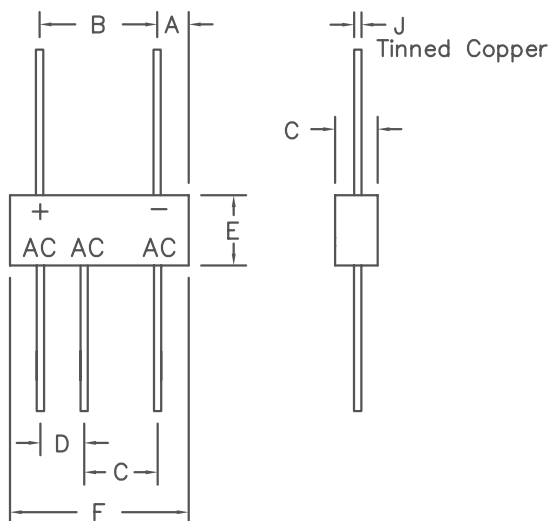


# Three Phase Bridges Standard and Fast Recovery 700 & 701 Series



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 VRRM
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
- VRRM 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— $T_A = 25^\circ\text{C}$	2.5A	2.25A
Maximum surge current	25A	20A
Max peak forward voltage per leg @ $25^\circ\text{C}$	1.0V @ 0.5A*	1.1V @ 0.5A*
Max peak reverse current @ $25^\circ\text{C}$ , at Vrrm	2uA	2uA
Max peak reverse current @ $100^\circ\text{C}$ , at Vrrm	100uA	100uA
Max. recovery time 10mA, 10mA, 5mA	---	500nS

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

## Thermal and Mechanical Characteristics

Storage temp range	TSTG	-65°C to 150°C
Operating junction temp range	TJ	-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

# 700 & 701

Figure 1  
Typical Forward Characteristics – Per Leg  
700 Series

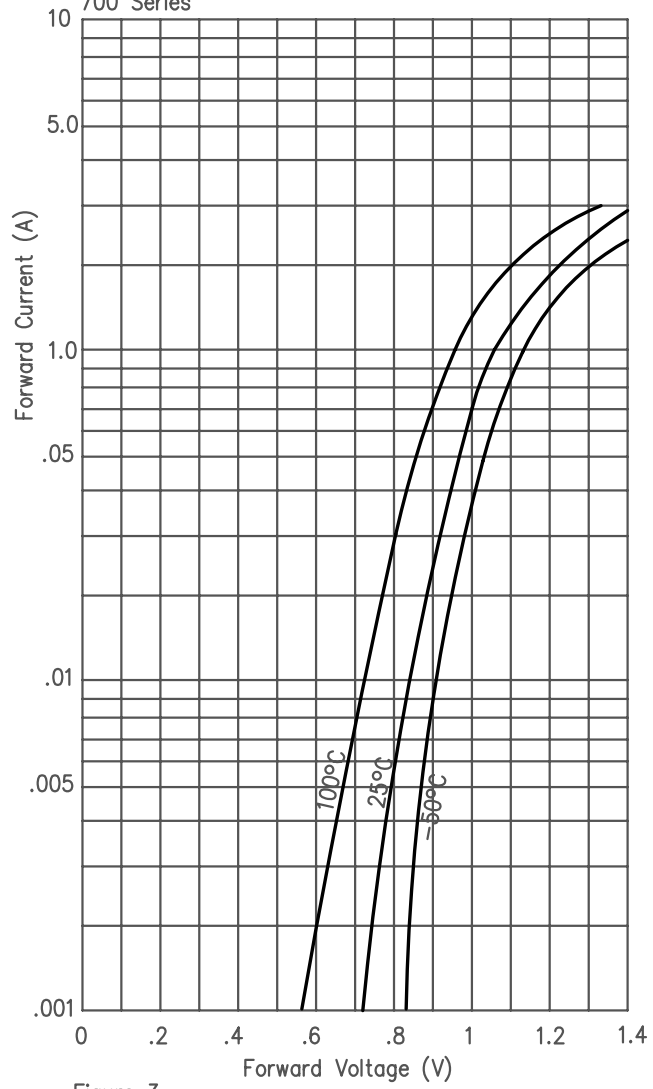


Figure 2  
Typical Forward Characteristics – Per Leg  
701 Series

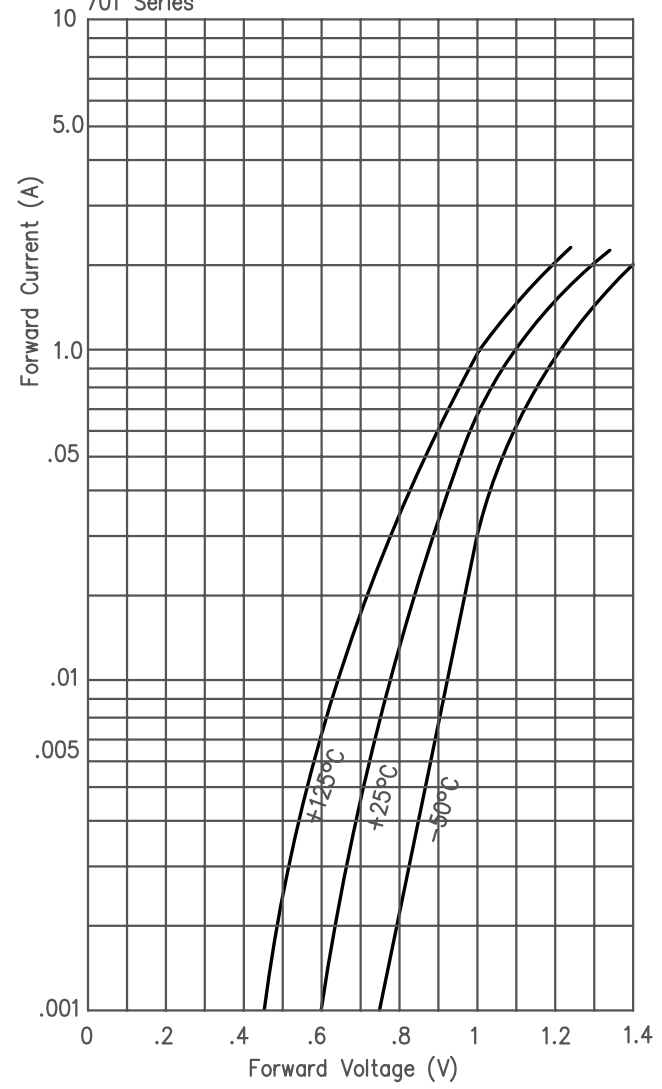


Figure 3  
Typical Leakage Current – Per Leg

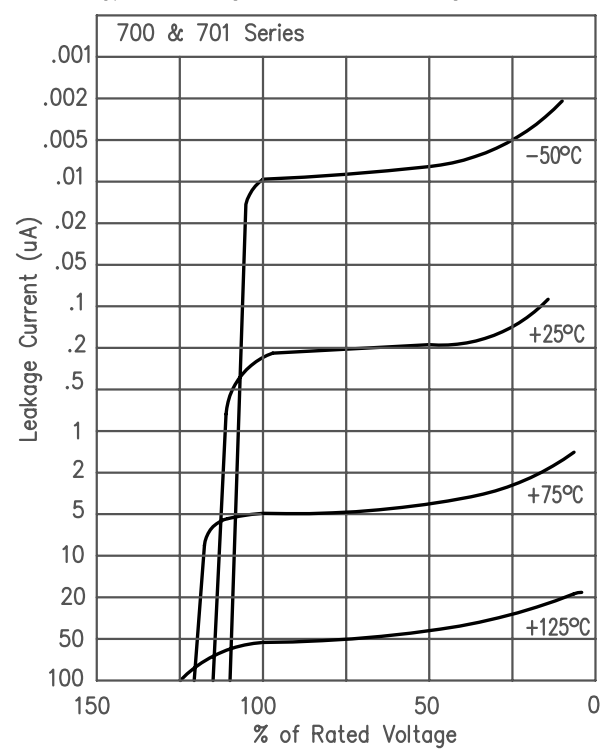


Figure 4  
Current Derating

