

# RECTIFIER ASSEMBLIES

700, 701 SERIES

3

## Three Phase Bridges, 2.5 Amp, Standard and Fast Recovery

### FEATURES

- Miniature Package
- Recovery Time: to 500ns
- Surge Ratings: to 25A
- PIV: from 100 to 600V
- Controlled Avalanche Characteristics
- Only Fused-in-Glass Diodes Used

### DESCRIPTION

These miniature transfer-molded high-voltage three-phase power bridges are designed for universal application in power supplies. One basic bridge fills current requirements up to 2.5A, with PIV's from 100 to 600 volts and recovery times of standard and 500ns.

### ABSOLUTE MAXIMUM RATINGS

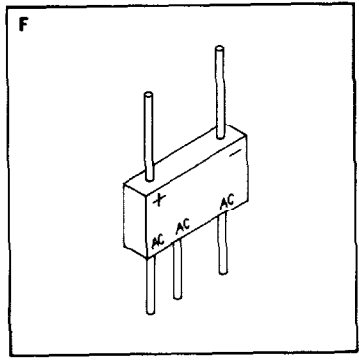
Peak Inverse Voltage .....	100 to 600V
Maximum Average D.C. Output Current .....	See Electrical Specifications
Non-Repetitive Sinusoidal Surge (8.3ms) .....	See Electrical Specifications
Operating and Storage Temperature Range .....	-65°C to +150°C
Thermal Resistance Junction-to-Ambient .....	25°C/W

### MECHANICAL SPECIFICATIONS

**700, 701 SERIES**

	Ins.	mm.
A	.310	7.87
B	.621	15.77
C	.512 REF.	13.0 REF.
D	.460 MAX.	11.68 MAX.
E	.255	6.48
F	1.030 MAX.	26.16 MAX.
G	.220 MAX.	5.59 MAX.
H	.875	22.23
J	.028 DIA.	0.71 DIA.

Typical Weight — 0.12 ounces  
3.5 grams



### MARKING

Alternating Current Input	A.C.
Cathode — Positive Output	+
Anode — Negative	

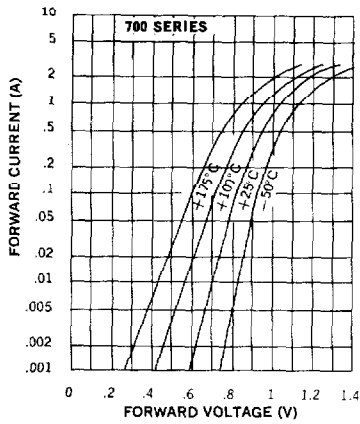
Part number is printed on the body.

**Microsemi Corp.**  
**Watertown**  
The diode experts

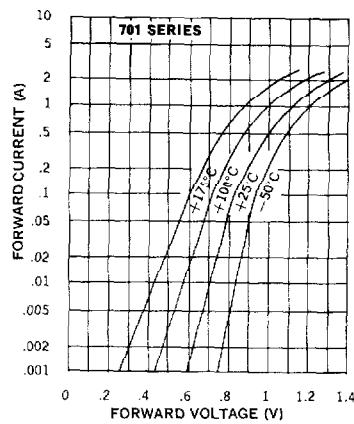
Electrical Specifications (at 25°C unless noted)					Maximum Ratings		
Type	PIV Per Leg	Maximum Forward Voltage Drop Per Leg	Leakage Current Per Leg @ PIV		Maximum Reverse Recovery Time†	Maximum Average D.C. Output Current	Non-Repetitive Sinusoidal Surge (8.3ms)
			T <sub>A</sub> = 25°C	T <sub>A</sub> = 100°C		T <sub>A</sub> = 55°C	
	Volts		µA	µA	ns	Amps	Amps
Standard Recovery	700-1	100	1.0V @ 0.5A	2	100	2.5	25
	700-2	200					
	700-3	300					
	700-4	400					
	700-5	500					
	700-6	600					
Fast Recovery	701-1	100	1.1V @ 0.5A	2	100	2.25	20
	701-2	200					
	701-3	300					
	701-4	400					
	701-5	500					
	701-6	600					

†Measured in a reverse recovery circuit switching from 10mA forward to 10mA reverse current recovering to 5mA.

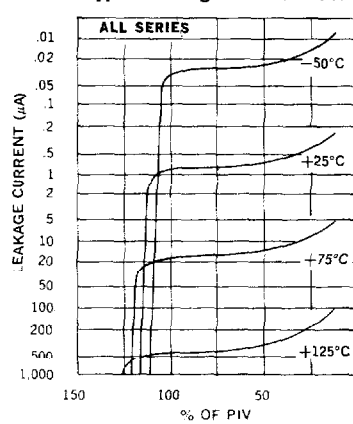
Typical Forward Voltage Per Leg vs. Forward Current



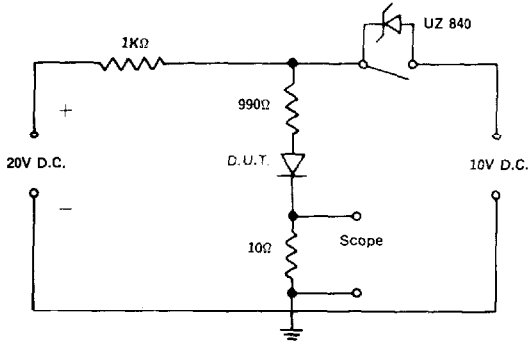
Typical Forward Voltage Per Leg vs. Forward Current



Typical Leakage Current vs. PIV



Reverse Recovery Circuit



Current Derating Curve

