RECTIFIER ASSEMBLIES

Three Phase Bridges, 2.5 Amp, Standard and Fast Recovery

3

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

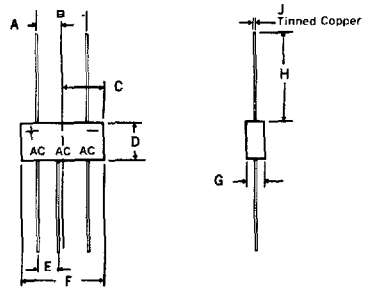
DESCRIPTION
These miniature transfer-molded high-voltage three-phase power bridges are designed for universal application in power supplies. One basic bridge fills current requirements up to 2.5A, with PIV's from 100 to 600 volts and recovery times of standard and 500ns.

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

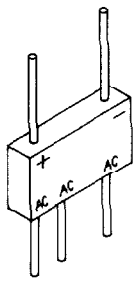
700, 701 SERIES



	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

F



MARKING

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

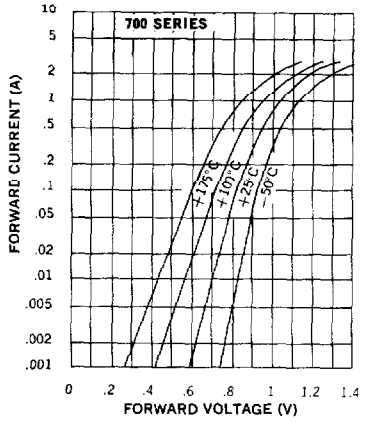
Part number is printed on the body.

Microsemi Corp.
Watertown
The diode experts

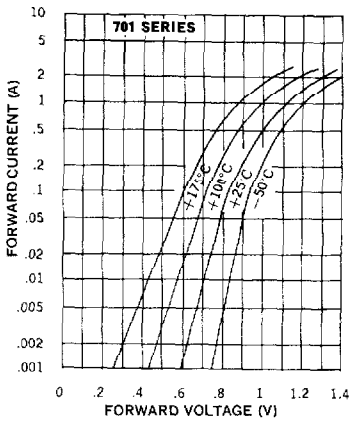
Electrical Specifications (at 25°C unless noted)							Maximum Ratings	
Type		PIV Per Leg	Maximum Forward Voltage Drop Per Leg	Leakage Current Per Leg @ PIV $T_A = 25°C$	Leakage Current Per Leg @ PIV $T_A = 100°C$	Maximum Reverse Recovery Time†	Maximum Average D.C. Output Current $T_A = 55°C$	*Non-Repetitive* Sinusoidal Surge (8.3ms)
		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	500	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.

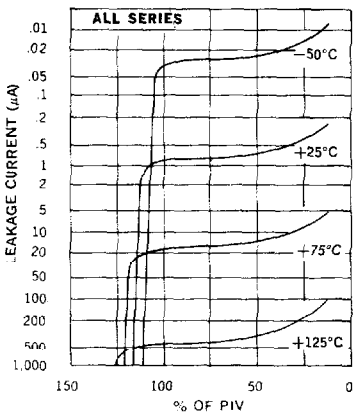
Typical Forward Voltage Per Leg vs. Forward Current



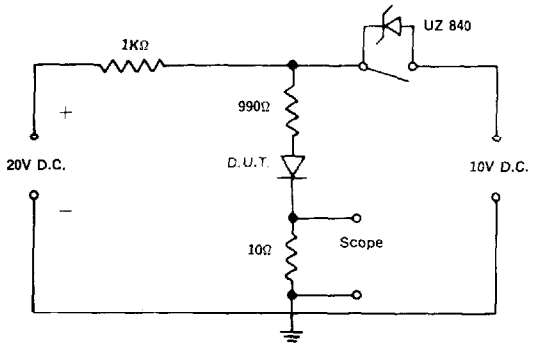
Typical Forward Voltage Per Leg vs. Forward Current



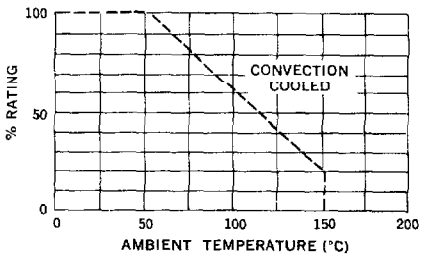
Typical Leakage Current vs. PIV



Reverse Recovery Circuit



Current Derating Curve



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