

# RECTIFIER ASSEMBLIES

697, 698 SERIES

## Single Phase Bridges, 7.5 Amp, Standard and Fast Recovery

3

### FEATURES

- Miniature High Current Assemblies
- Continuous Ratings: to 7.5A
- Surge Ratings: to 80A
- PIV's: from 100V to 600V
- Recovery Times: to 500ns
- Only Fused-in-Glass Diodes Used
- Controlled Avalanche Characteristics

### DESCRIPTION

These miniature molded high-current single-phase bridges are designed for universal application in power supplies. One basic bridge fills current requirements up to 7.5A, with PIV's from 100 to 600 volts and recovery times of standard, and 500ns max.

### ABSOLUTE MAXIMUM RATINGS

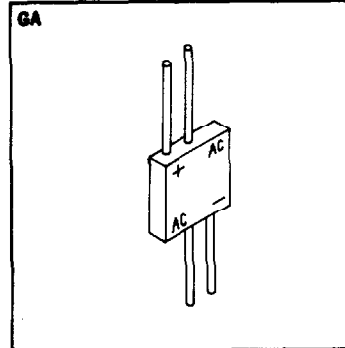
Peak Inverse Voltage .....	100 to 600V
Maximum Average D.C. Output Current .....	See Electrical Specifications
Non-Repetitive Sinusoidal Surge (8.3ms) .....	See Electrical Specifications
Operating and Storage Temperature Range .....	-65°C to +150°C
Thermal Resistance Junction to Ambient .....	32°C/W
Junction to Case .....	10°C/W

### MECHANICAL SPECIFICATIONS

**697, 698 SERIES**

	ins.	mm.
A	0.50±.01	12.70±.25
B	.032 DIA.	0.81 DIA.
C	1.0 MIN.	25.4 MIN.
D	.250 MAX.	6.35 MAX.
E	.150 TYP.	3.81 TYP.
F	0.50±.01	12.70±.25

Typical Weight — 0.14 ounces  
4.0 grams



### MARKING

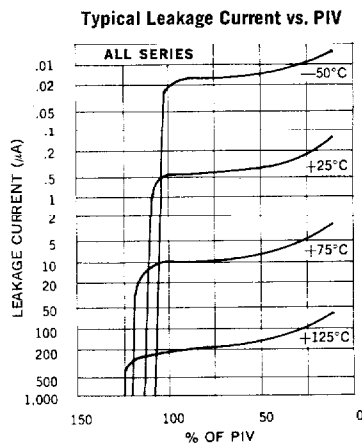
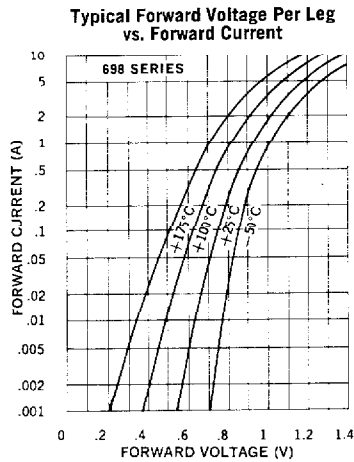
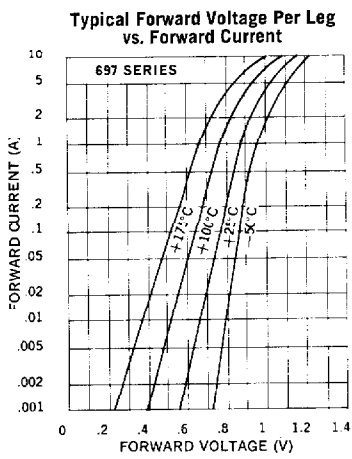
Alternating Current Input	A.C.
Cathode — Positive Output	+
Anode — Negative	-

Part number is printed on the body.

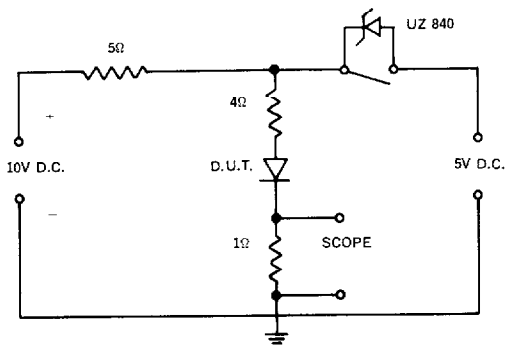
**Microsemi Corp.**  
**Watertown**  
*The diode experts*

Electrical Specifications (at 25°C unless noted)						Maximum Ratings		
Type	PIV Per Leg Volts	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> = 25°C	T <sub>C</sub> = 55°C	
			µA	µA	ns	Amps	Amps	Amps
Standard Recovery	697-1	100	1.0V @ 2A	5	200	2.5	7.5	80
	697-2	200						
	697-3	300						
	697-4	400						
	697-5	500						
	697-6	600						
Fast Recovery	698-1	100	1.1V @ 2A	5	200	2.25	7.0	70
	698-2	200						
	698-3	300						
	698-4	400						
	698-5	500						
	698-6	600						

†Measured in a reverse recovery circuit switching from 1A forward to 1A reverse current recovering to .5A.



Reverse Recovery Circuit



Current Derating Curve

