

# RECTIFIER ASSEMBLIES

Single Phase Bridges, 7.5 Amp, Standard and Fast Recovery

697, 698 SERIES

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

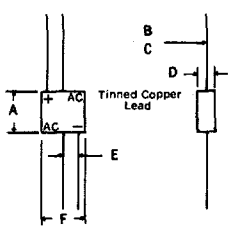
These miniature molded high-current single-phase bridges are designed for universal application in power supplies. One basic bridge fills current requirements up to 7.5A, with PIV's from 100 to 600 volts and recovery times of standard, and 500ns max.

## 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                        |

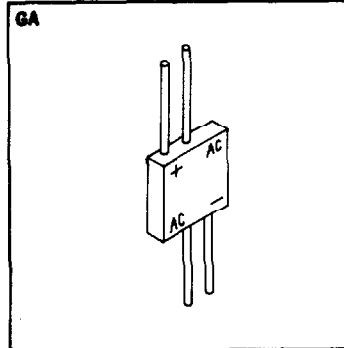
## MECHANICAL SPECIFICATIONS

**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



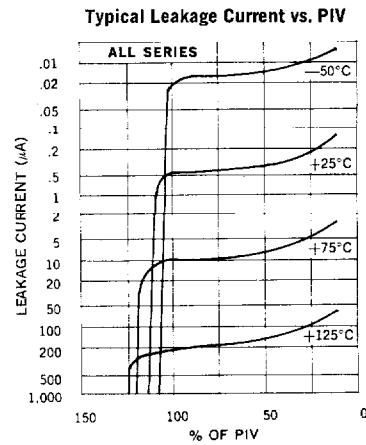
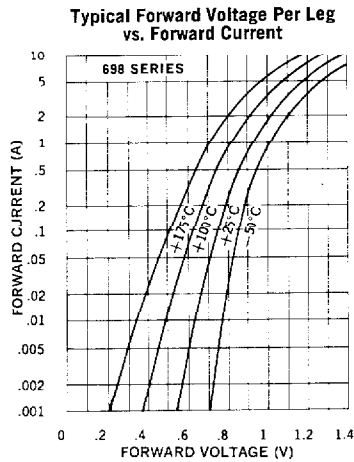
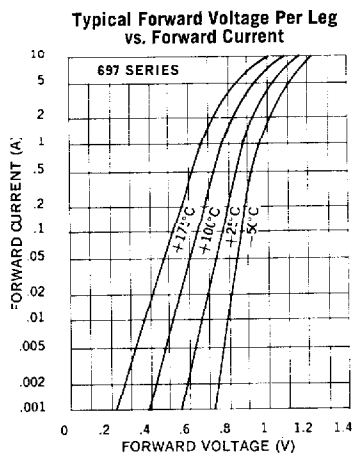
## MARKING

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

Part number is printed on the body.

| 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> = 25°C               | T <sub>C</sub> = 55°C |                                         |
|                                                  | Volts       |                                      | 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                      | 500                            | 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**

