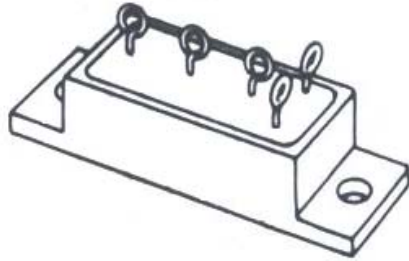




180 Lafayette Road  
 North Hampton, NH 03862-2448  
 PH: 603-964-3165  
 FX: 603-964-3168  
 WWW.PDEELECTRONICS.COM

**Rectifier Assemblies**  
 Three Phase Bridge, 15-25 Amp  
 Standard and Fast Recovery  
 678, 682, 695, & 696 SERIES

- FEATURES**
- Current Rating to 25A
  - PIVs: from 100V to 600V
  - Only Glass Passivated Diodes
  - Recovery Times to 500nS
  - Controlled Avalanche Characteristics
  - Surge Rating to 150A
  - Aluminum Heatsink Case
  - Electrically Insulated case

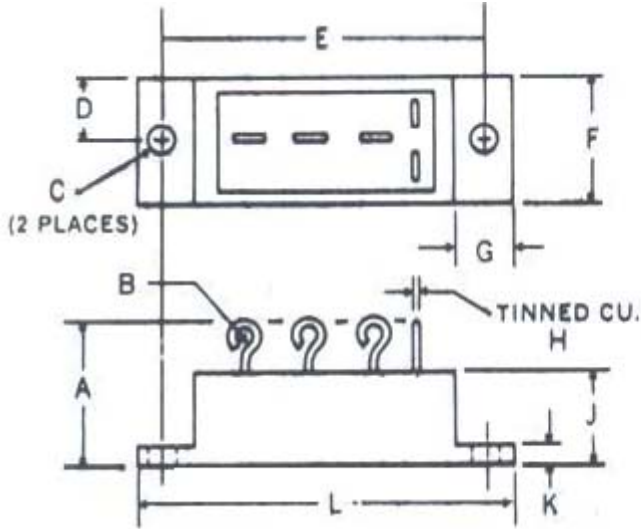


**DESCRIPTION**  
 This series of three phase bridges offer the max in high current power supply applications. The fast recovery series allows operation at full power and high frequencies (<40KHz squarewave), often used in choppers, inverters, and converters in aircraft and missile equipment

**ABSOLUTE MAXIMUM RATING**

Peak Inverse Voltage.....	100V to 600V
Max Average DC Output Current.....	See Electrical Specifications
Non-Repetitive Sinusoidal Surge (8.3ms) .....	See Electrical Specifications
Operating and Storage Temp Range.....	-65°C to +150°C
Typical Thermal Resistance, Junction to Ambient.....	20°C/W
Junction to Case, 678, 682 series.....	1.5°C/W
Junction to Case, 695, 696 series.....	3.0°C/W

**MECHANICAL SPECIFICATIONS**



	Ins.
A	.820 MAX.
B	.09 DIA. TYP.
C	.164-.174 DIA.
D	.365-.385
E	1.870-1.880
F	.740-.760
G	.370-.390
H	.040 TYP.
J	.486-.506
K	.115-.135
L	2.240-2.260



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ELECTRICAL CHARACTERISTICS (at T <sub>A</sub> =25°C unless noted)					MAXIMUM RATINGS			
	PIV Per Leg	Max Forward Voltage Drop Per Leg	Max Leakage Current Per Leg @ PIV		Max Reverse Recovery Time*	Max Average DC Output Current		Non-Repetitive Sinusoidal Surge (8.3ms)
			T <sub>A</sub> =25°C	T <sub>A</sub> =100°C		T <sub>c</sub> =55°C	T <sub>c</sub> =100°C	
	Volts		µA	µA	nS	Amps	Amps	Amps
<u>Standard Recovery</u> 678-1 678-2 678-3 678-4 678-5 678-6	100 200 300 400 500 600	1.2V @ 10A	10	200	-	25	18.5	150
<u>Standard Recovery</u> 695-1 695-2 695-3 695-4 695-5 695-6	100 200 300 400 500 600	1.2V @ 2A	5	150	-	15	9	80
<u>Fast Recovery</u> 682-1 682-2 682-3 682-4 682-5 682-6	100 200 300 400 500 600	1.2V @ 6A	10	200	500	20	14	150
<u>Fast Recovery</u> 696-1 696-2 696-3 696-4 696-5 696-6	100 200 300 400 500 600	1.2V @ 2A	5	150	500	15	9	60

\*Measured on discretes prior to assembly in reverse recovery circuit switching from 1.0A forward to 1.0A current recovering to 0.5A.

**MARKING**

Mfg and Part Number	Printed On Side
Alternating Current Input	Yellow Dot
Cathode-Positive Output	Red Dot
Anode-Negative	Grey Dot