

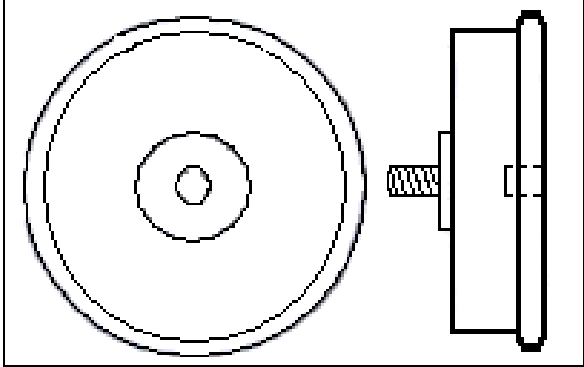


180 Lafayette Road  
 North Hampton, NH 03862-2448  
 PH: 603-964-3165  
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**Rectifier Assembly**  
 High Voltage Doorbell Assembly  
 Standard and Fast Recovery  
 UGB, UGD, UGE, UGF Series

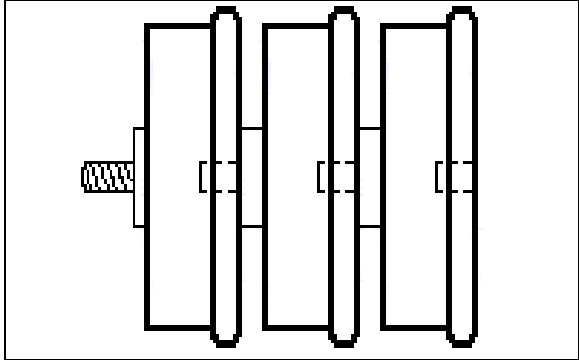
**FEATURES**

PIV: 2.5 kV to 10kV  
 Current Rating: to 10 A  
 Recovery Times: to 500nS  
 Only Glass Passivated Diodes Used  
 Controlled Avalanche Characteristics  
 Aluminum Heat Sink Base  
 Packaged for Easy Stacking



**DESCRIPTION**

This series of high-voltage, high current stacks incorporate a unique design that allows for high power applications such as charge, hold-off and clipper diodes. This design allows stacking of multiple units when higher voltages are necessary.



**ABSOLUTE MAXIMUM RATING**

Peak Inverse Voltage	
UGB, UGD.....	5kV to 10kV
UGE, UGF.....	2.5kV to 7.5kV
Average DC Output Current	.....See Electrical Specifications
One Cycle Surge Current (8.3mS, half sine, T <sub>J</sub> =25°C)	..... See Electrical Specifications
Storage and Operating Temperature.....	-55°C to 150°C



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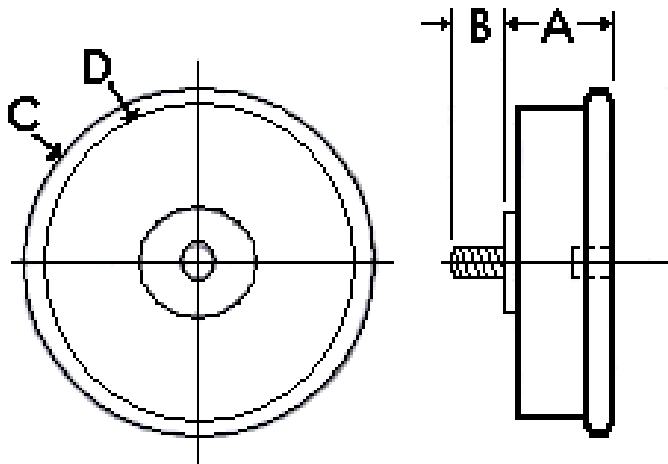
## Rectifier Assembly

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ELECTRICAL SPECIFICATIONS (at 25°C unless noted)					MAXIMUM RATINGS				
Type	PIV	Maximum Forward Drop Per Leg	Leakage Current @ PIV	Maximum Reverse Recovery Time <sup>(1)</sup>	Transient Energy Absorption  *1	Maximum Average D.C. Output Current		Non-Repetitive Sinusoidal Surge (8.3mS) T <sub>c</sub> =100°C	
						T <sub>c</sub> =75°C AIR	T <sub>c</sub> =50°C OIL		
	kV		μA	nS	Joules	Amps	Amps	Amps	
Standard Recovery	UGE2.5	2.5	5V @ 3.3A	10	-	8	6.60	10.00	200
	UGE5	5.0	10V @ 2.5A	15		14	5.00	7.50	200
	UGB5	5.0	9V @ 2.2A	5		7	4.40	6.60	100
	UGE7.5	7.5	13V @ 1.6A	10		20	3.30	5.00	200
	UGB7.5	7.5	13V @ 1.5A	5		10	3.00	5.00	100
Fast Recovery	UGB10	10	17V @ 1.1A	5	14	2.30	3.50	100	
	UGF2.5	2.5	6V @ 2.5A	10	500 <sup>(2)</sup> 350 <sup>(3)</sup>	8	5.00	8.00	150
	UGF5	5.0	11V @ 1.8A	10		14	3.75	6.00	150
	UGD5	5.0	11V @ 1.6A	5		7	3.30	4.80	80
	UGF7.5	7.5	17V @ 1.2A	10		20	2.50	4.00	150
UGD7.5	7.5	17V @ 1.1A	5	10		2.25	3.50	80	
UGD-10	10	22V @ .85A	5	5	14	1.75	2.50	80	

- 1) Tested on discrete devices prior to assembly.
- 2) Conditions IF= 1A, IR=1A, IRR= 0.5A
- 3) Conditions IF=0.5A, IR=1A, IRR=0.25A

### MECHANICAL SPECIFICATIONS



DIMENSIONS			
Dim	Inches		Note
	Min	Max	
A	-	1.020	
B	-	.316	
C	-	3.487	Dia
D	-	3.02	Dia
.375-24 Thread			

**POLARITY**  
 Cathode connected to base  
**MARKING:**  
 Part number using epoxy ink