

RECTIFIER ASSEMBLIES

High Voltage Doorbell® Modules
Standard and Fast Recovery

UGB, UGD, UGE, UGF SERIES

FEATURES

- Current Ratings: to 10A
- PIV: 2.5 kV to 10kV
- Recovery Times: to 500ns
- Only Fused-in-Glass Diodes Used
- Controlled Avalanche Characteristics
- Stackable to 600kV
- Modular Package for Easy Stacking

DESCRIPTION

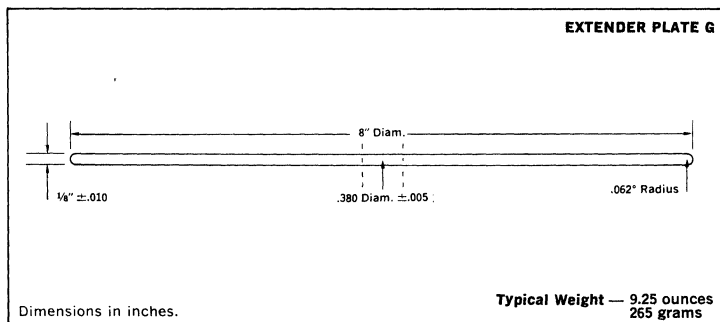
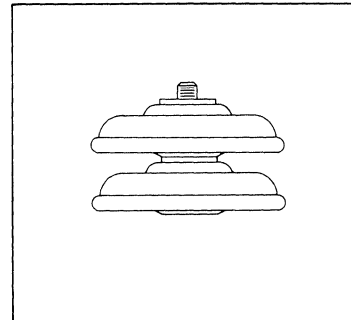
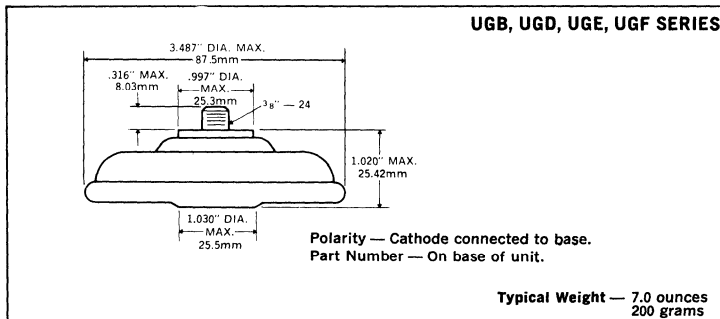
This series of high-voltage, high-current stacks that incorporate a unique modular design makes it particularly well-suited for high power applications such as in radar systems as charge, hold-off and clipper diodes.

ABSOLUTE MAXIMUM RATINGS

Peak Inverse Voltage	UGB, UGD Series	5kV to 10kV
	UGS, UGF Series	2.5kV to 7.5kV
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	

VII

MECHANICAL SPECIFICATIONS



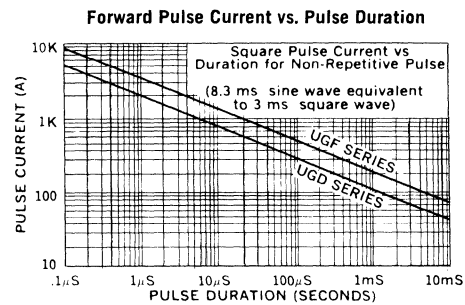
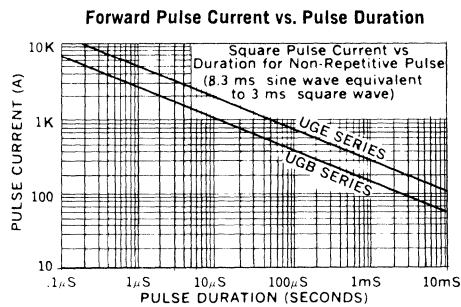
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Electrical Specifications (at 25°C unless noted)					Maximum Ratings				
Type	PIV	Maximum Forward Voltage Drop	Maximum Leakage Current @ PIV	Maximum Reverse Recovery Time	Maximum Average D.C. Output Current			Non-repetitive Sinusoidal Surge (8.3ms)	Maximum Reverse Transient Energy Absorption
					T _C = 75°C Air	T _C = 60°C Air with Extender Plate**	T _C = 50°C Oil		
					Amps	Amps	Amps	Amps	joules
Standard Recovery	UGE-2.5	2.5	5V @ 3.30A	10	6.60	8.25	10.00	200	8
	UGE-5	5	10V @ 2.50A	15	5.00	6.25	7.50	200	14
	UGB-5	5	9V @ 2.20A	5	4.40	5.50	6.60	100	7
	UGE-7.5	7.5	13V @ 1.60A	10	3.30	4.10	5.00	200	20
	UGB-7.5	7.5	13V @ 1.50A	5	3.00	3.75	5.00	100	10
	UGB-10	10	17V @ 1.10A	5	2.30	2.85	3.50	100	14
Fast Recovery	UGF-2.5	2.5	6V @ 2.50A	10	5.00	6.25	8.00	150	8
	UGF-5	5	11V @ 1.80A	10	3.75	4.70	6.00	150	14
	UGD-5	5	11V @ 1.60A	5	3.30	4.10	4.80	80	7
	UGF-7.5	7.5	17V @ 1.20A	10	2.50	3.10	4.00	150	20
	UGD-7.5	7.5	17V @ 1.10A	5	2.25	2.80	3.50	80	10
	UGD-10	10	22V @ 0.85A	5	1.75	2.20	2.50	80	14

*Measured in a reverse recovery circuit switching from 1.0A forward to 1.0A reverse current recovering to 0.5A.

†Measured in a reverse recovery circuit switching from 0.5A forward to 1.0A reverse current recovering to 0.25A.

**These ratings are based on using "extender plates" that provide additional surface area to radiate heat. Because of possible corona effects caused by scratches on these plates, extreme care is necessary in their handling and they are not recommended where the working voltage exceeds 7.5KV/module. They should be carefully polished prior to installation.



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