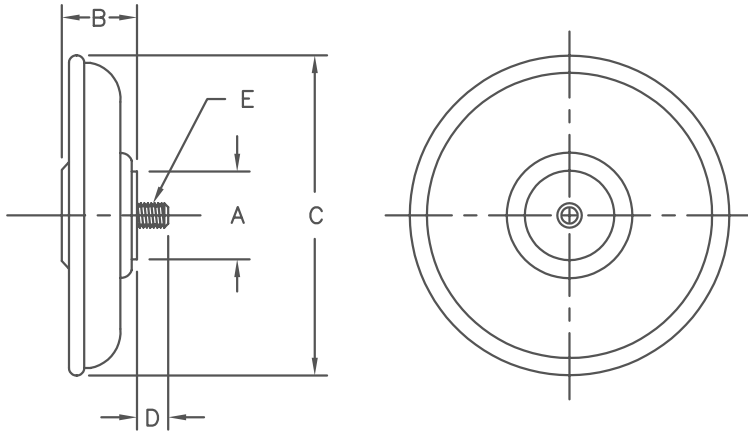


# High Voltage Doorbell Modules Standard and Fast Recovery UGB, UGD, UGE, & UGF Series



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	---	.997	---	25.3	Dia.
B	---	1.020	---	25.42	
C	---	3.487	---	87.5	Dia.
D	---	.316	---	8.03	
E	---	3/8"	---	24.0	

- Notes:  
 1. Cathode connected to base.  
 2. Part Number - On base of unit.

Microsemi Catalog Number	Working Peak Reverse Voltage VRRM
UGB series	5kV to 10kV
UGD series	5kV to 10kV
UGE series	2.5kV to 7.5kV
UGF series	2.5kV to 7.5kV

- Current ratings to 10A
- VRRM 2.5kV to 10kV
- Only fused-in-glass diodes used
- 150°C junction temperature
- Surge ratings to 200A
- Recovery time to 350nS
- Modular design for easy stacking
- MIL-PRF-19500 Similarity

Electrical Characteristics								
	VRRM	Maximum Forward Voltage Drop	Maximum Leakage Current	Maximum Reverse Recovery Time	Maximum Average D.C. Output Current		Non-Repetitive Sinusoidal Surge (8.3ms)	Maximum Leakage Reverse Transient Energy Absorption
					T <sub>C</sub> = 75°C	T <sub>C</sub> = 50°C		
					225LFM Air Flow	Oil	T <sub>C</sub> = 100°C	
Standard Recovery	kV		uA	nS	Amps	Amps	Amps	Joules
UGE-2.5	2.5	5V @ 3.30A	10	---	6.60	10.00	200	8
UGE-5	5	10V @ 2.50A	15	---	5.00	7.50	200	14
UGB-5	5	9V @ 2.20A	5	---	4.40	6.60	100	7
UGE-7.5	7.5	13V @ 1.60A	10	---	3.30	5.00	200	20
UGB-7.5	7.5	13V @ 1.50A	5	---	3.00	5.00	100	10
UGB-10	10	17V @ 1.10A	5	---	2.30	3.50	100	14
Fast Recovery								
UGF-2.5	2.5	6V @ 2.50A	10	---	5.00	8.00	150	8
UGF-5	5	11V @ 1.80A	10	---	3.75	6.00	150	14
UGD-5	5	11V @ 1.60A	5	*500	3.30	4.80	80	7
UGF-7.5	7.5	17V @ 1.20A	10	**350	2.50	4.00	150	20
UGD-7.5	7.5	17V @ 1.10A	5	---	2.25	3.50	80	10
UGD-10	10	22V @ 0.85A	5	---	1.75	2.50	80	14

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

Thermal and Mechanical Characteristics		
Storage temp range	TSTG	-65°C to 150°C
Operating junction temp range	TJ	-65°C to 150°C
Weight - typical		200 grams

# UGB, UGD, UGE & UGF

Figure 1  
Typical Forward Characteristics  
UGB, UGD Series

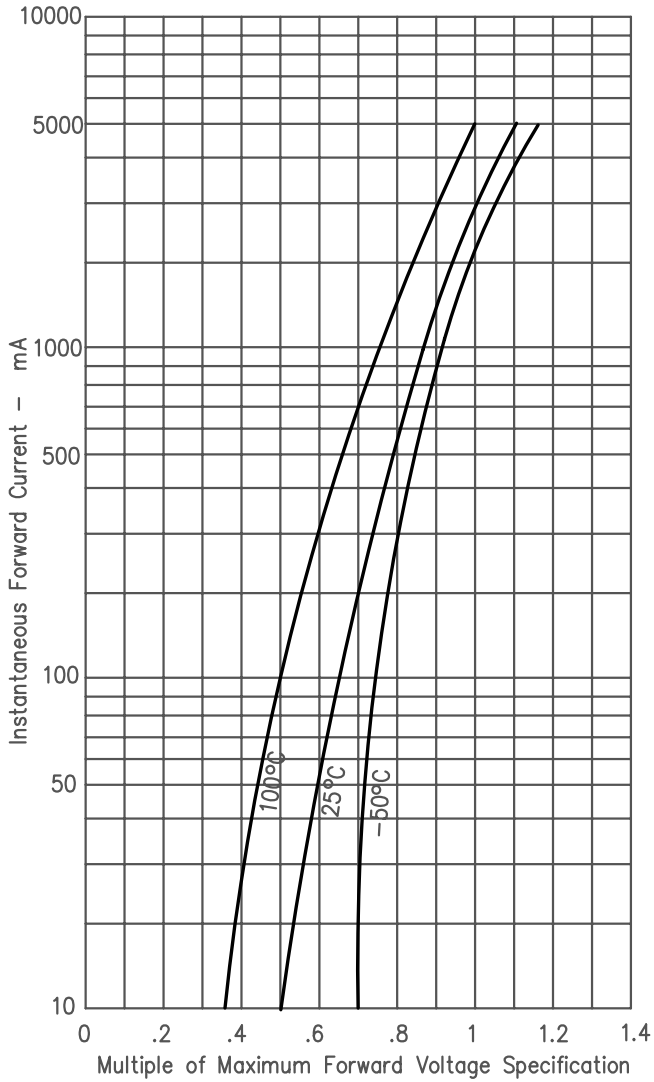


Figure 2  
Typical Forward Characteristics  
UGE, UGF Series

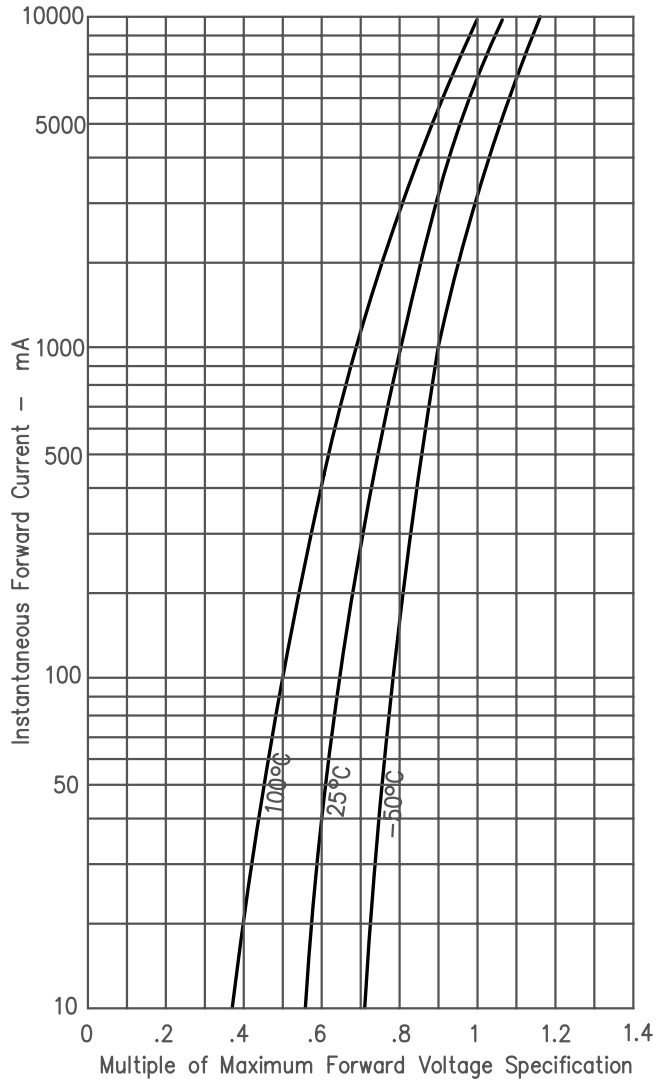


Figure 3  
Typical Reverse Leakage Current  
UGB, UGD Series

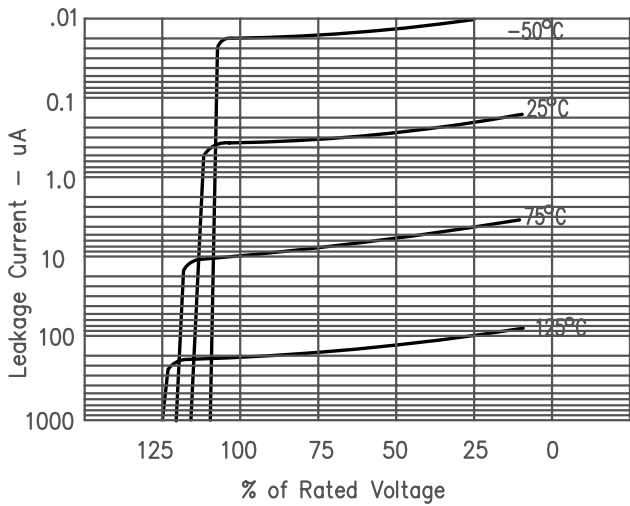
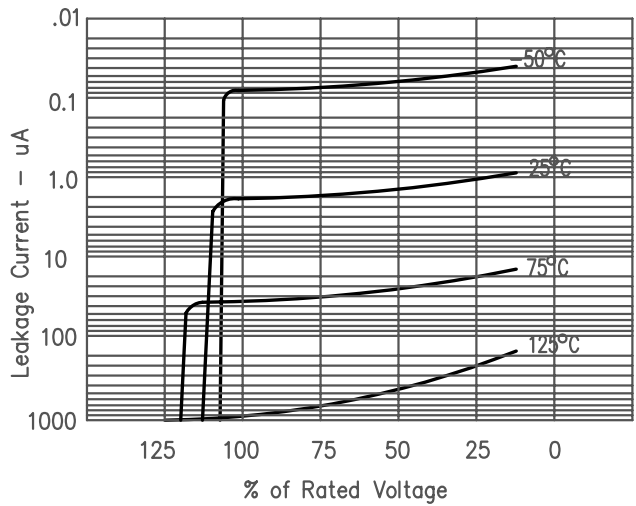


Figure 4  
Typical Reverse Leakage Current  
UGE, UGF Series



# UGB, UGD, UGE, & UGF

Figure 5  
Output Current Ratio vs. Velocity of Air Flow

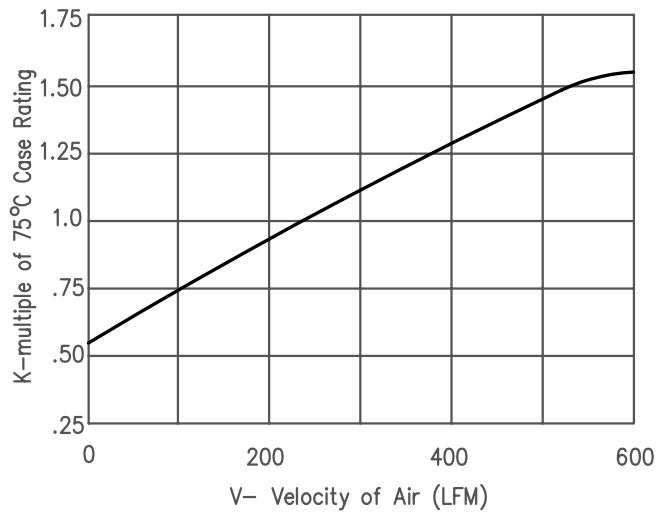


Figure 6  
Current Derating Curve

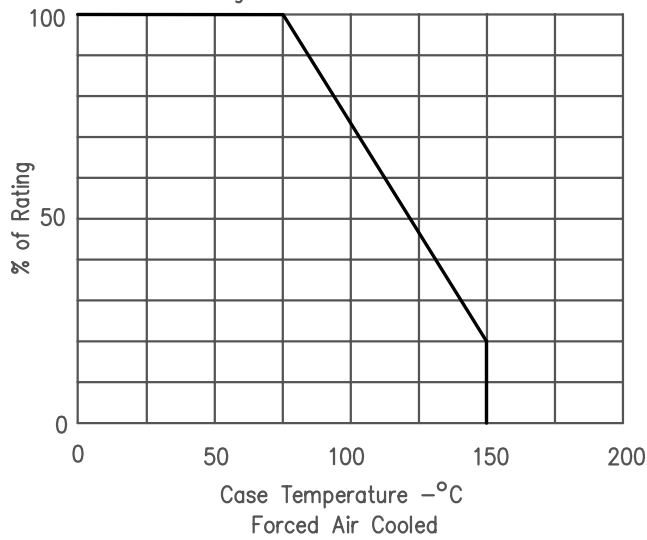


Figure 7  
Current Derating Curve

