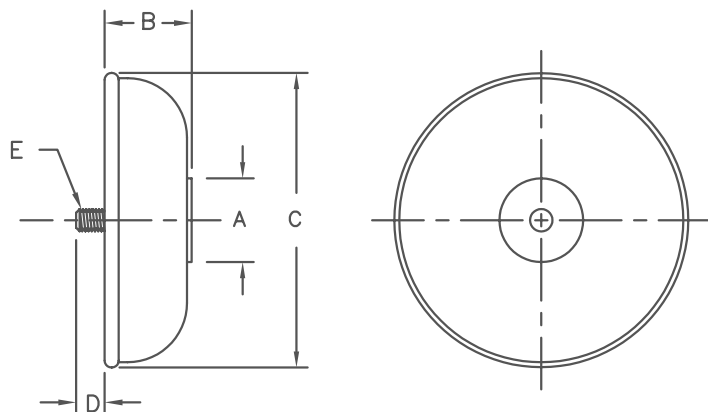


High Voltage Doorbell Modules Standard and Fast Recovery UDA, UDB, UDC, UDD, UDE & UDF Series



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	0.63	---	16.08	---	Dia.
B	---	0.78	---	19.81	
C	---	1.90	---	48.26	Dia.
D	0.25	---	6.35	---	Typ.
E	---	---	---	---	1/4-28

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

Microsemi Catalog Number	Working Peak Reverse Voltage VRRM
UDA, UDC series	5kV to 15kV
UDB, UDD series	2.5kV to 7.5kV
UDE, UDF series	2.5kV to 5kV

- Current ratings to 7.7A
- VRRM to 15kV
- Only fused-in-glass diodes used
- 150°C junction temperature
- Surge ratings to 200A
- Recovery time to 500nS
- 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) TC = 100°C	Maximum Leakage Reverse Transient Energy Absorption
					TC = 75°C Air Flow	TC = 50°C Oil		
					Amps	Amps		
Standard Recovery								
UDE-2.5	2.5	5V @ 3.00A	10	---	***6.00	7.70	200	8
UDB-2.5	2.5	4V @ 1.50A	5	---	3.00	4.25	100	4
UDE-5	5	10V @ 2.20A	10	---	***4.50	5.50	200	14
UDB-5	5	8V @ 1.00A	5	---	2.00	2.75	100	8
UDA-5	5	8V @ 0.82A	2	---	1.65	2.20	30	1.5
UDB-7.5	7.5	12V @ 0.70A	5	---	1.33	2.00	100	12
UDA-7.5	7.5	12V @ 0.60A	2	---	1.25	1.75	30	2.5
UDA-10	10	16V @ 0.50A	2	---	1.00	1.40	30	3
UDA-15	15	25V @ 0.33A	2	---	0.67	0.90	30	5
Fast Recovery								
UDF-2.5	2.5	6V @ 2.20A	10	---	4.50	5.30	150	8
UDD-2.5	2.5	6V @ 1.20A	5	---	2.25	3.30	80	4
UDF-5	5	11V @ 1.60A	10	---	3.30	4.40	150	14
UDD-5	5	11V @ 0.75A	5	---	1.50	2.00	80	8
UDC-5	5	10V @ 0.70A	2	*500	1.20	1.70	25	1.5
UDD-7.5	7.5	17V @ 0.50A	5	**350	1.00	1.50	80	12
UDC-7.5	7.5	15V @ 0.50A	2	---	.90	1.25	25	2.5
UDC-10	10	20V @ 0.37A	2	---	.75	1.00	25	3
UDC-15	15	30V @ 0.25A	2	---	.50	.70	25	5

* 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.

*** These ratings are based on TC = 100°C

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		60 grams

UDA, UDB, UDC, UDD, UDE & UDF

Figure 1
Typical Forward Characteristics
UDA, UDC Series

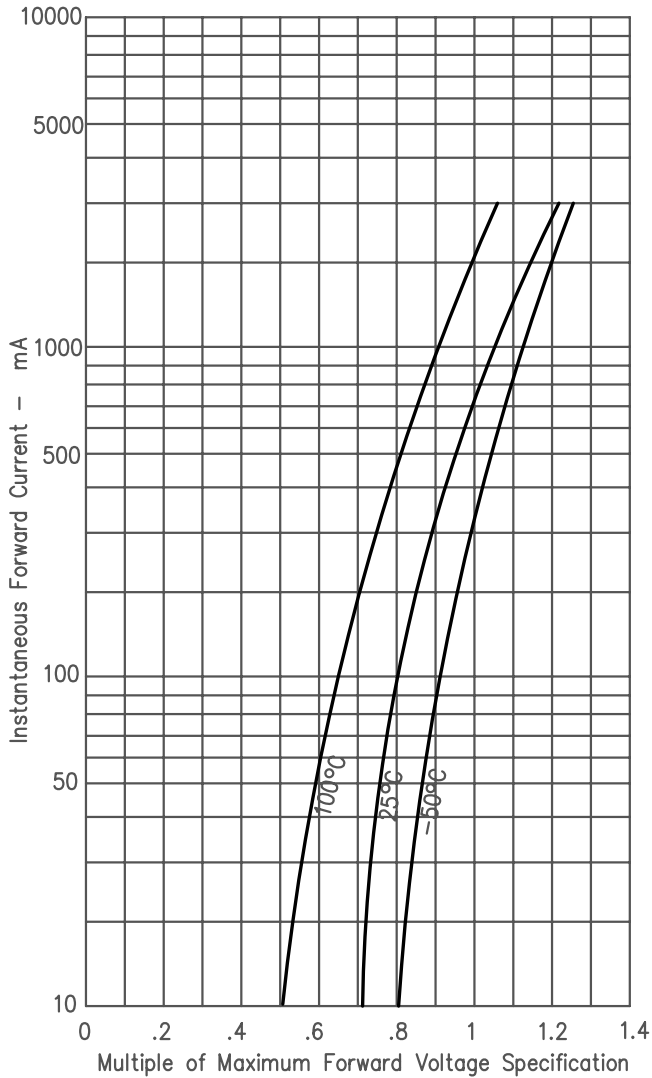


Figure 3
Current Derating – Natural Convection

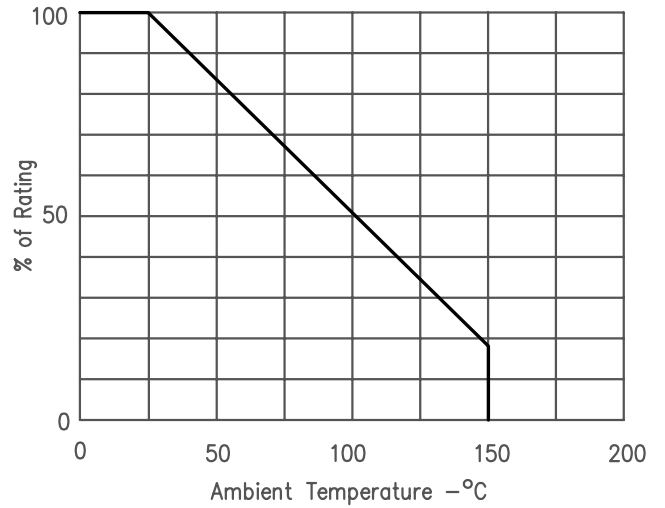
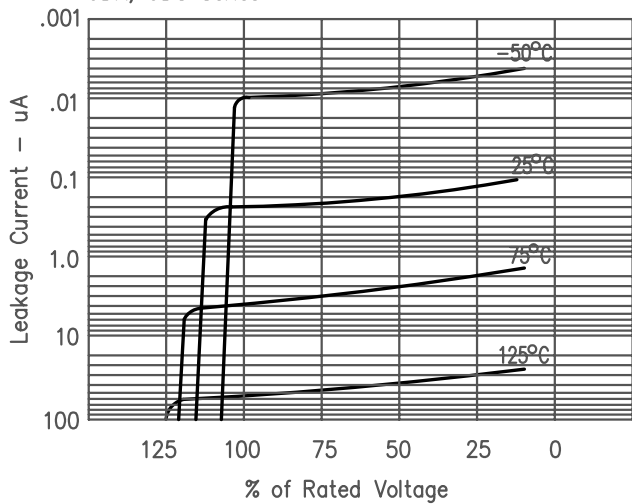


Figure 2
Typical Reverse Leakage Current
UDA, UDC Series



UDA, UDB, UDC, UDD, UDE & UDF

Figure 1
Typical Forward Characteristics
UDB, UDD Series

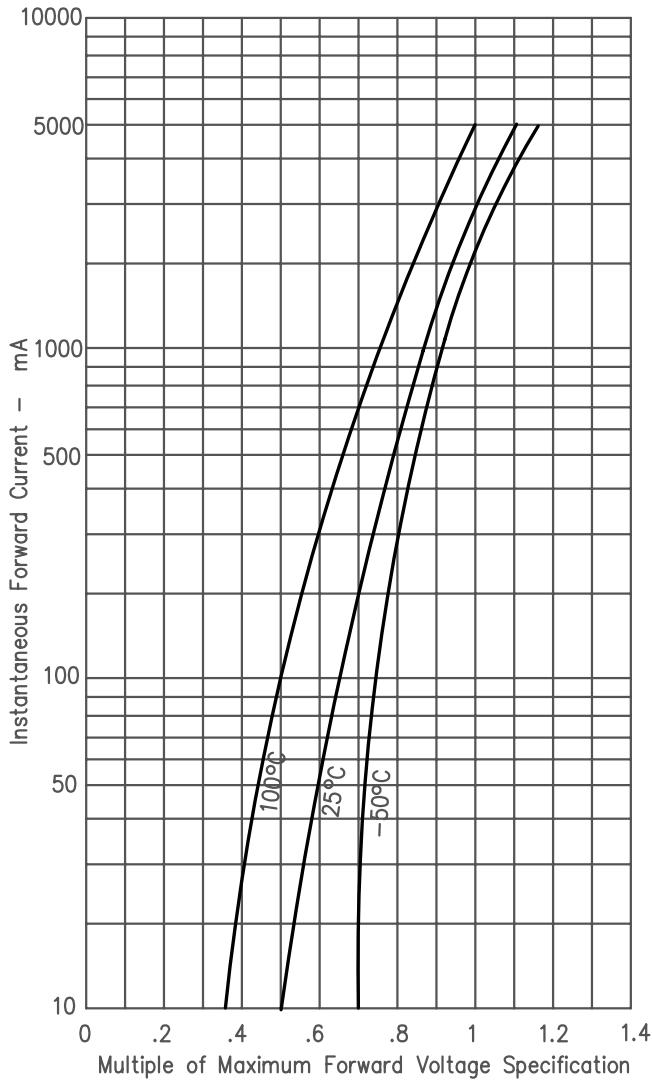


Figure 3
Current Derating – Forced Air Cooled

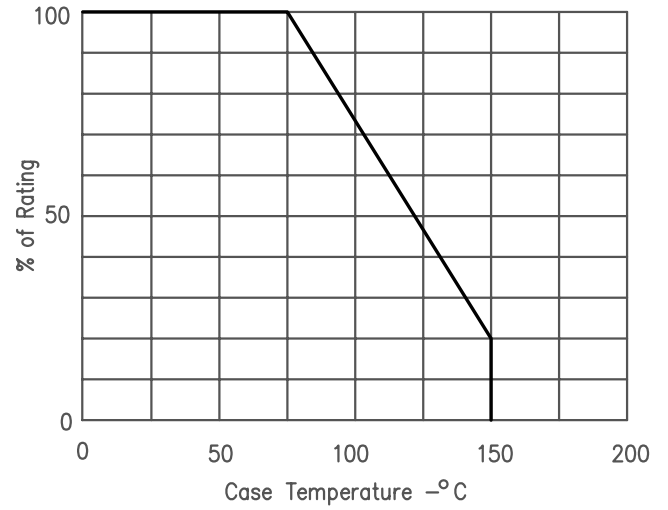


Figure 4
Output Current vs. Air Flow

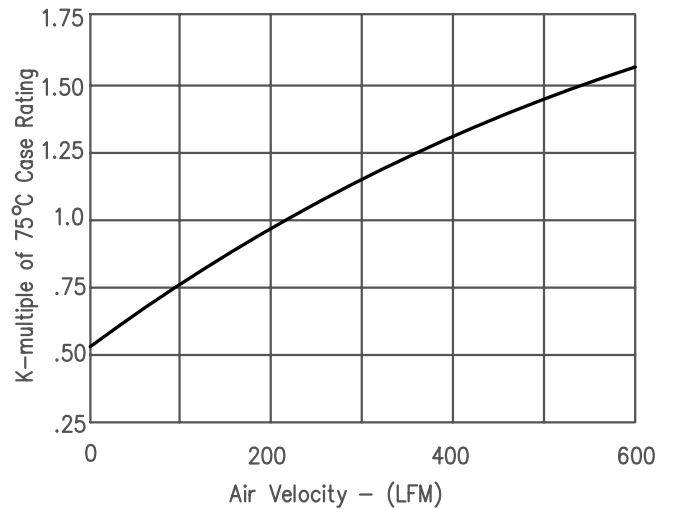
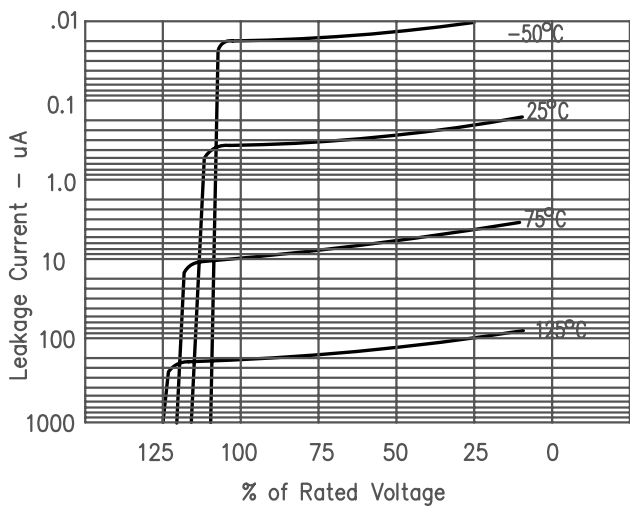


Figure 2
Typical Reverse Leakage Current
UDB, UDD Series



UDA, UDB, UDC, UDD, UDE & UDF

Figure 1
Typical Forward Characteristics
UDE, UDF Series

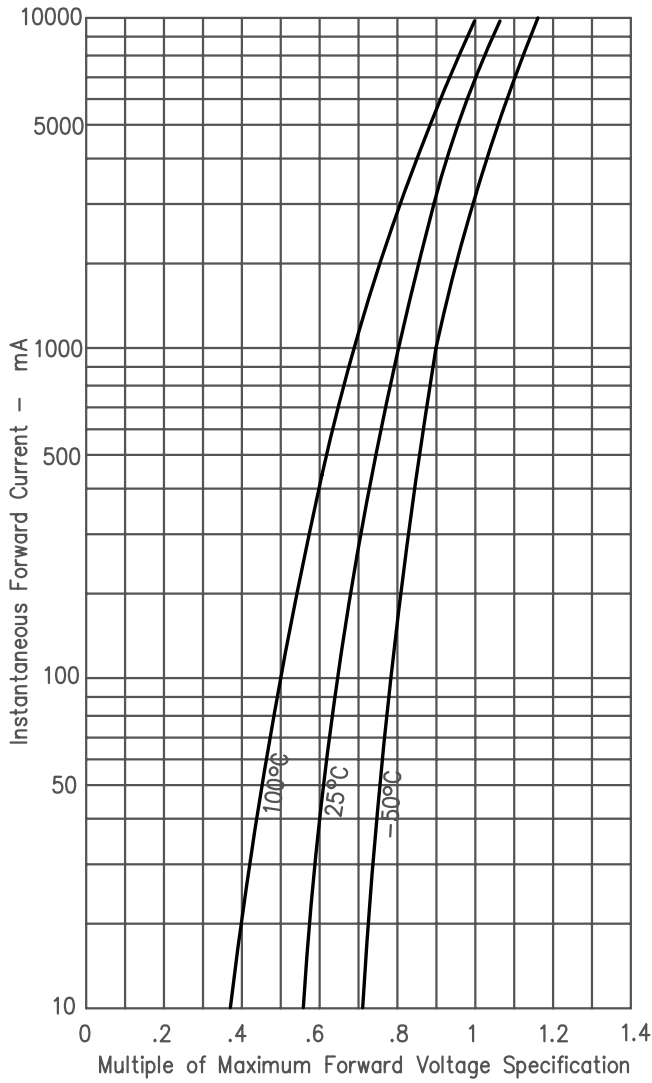


Figure 3
Current Derating - Oil Cooled

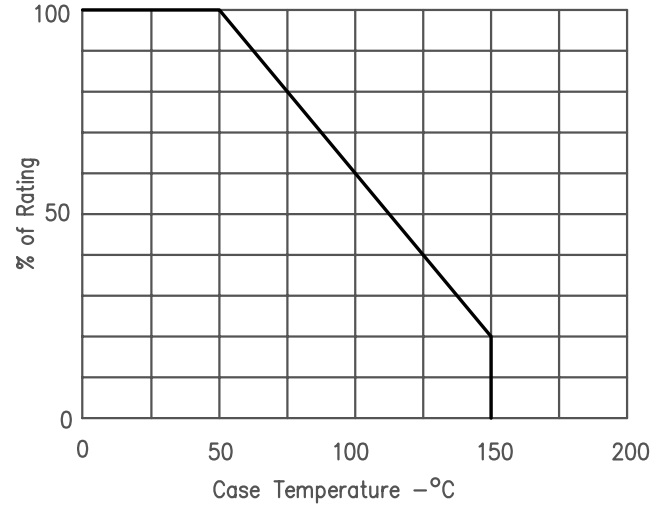


Figure 2
Typical Reverse Leakage Current
UDE, UDF Series

