



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

**Rectifier Assemblies**  
 High Voltage Doorbell Modules  
 Standard and Fast Recovery  
 UDA, UDB, UDC, UDD, UDE, & UDF SERIES

PDE Part Number	Working Peak Reverse Voltage
UDA, UDC Series	5kV to 15 kV
UDB, UDD Series	2.5 kV to 7.5 kV
UDE, UDF Series	2.5kV to 5 kV



- Peak reverse voltage to 15kV
- Current rating to 7.7A
- Using glass-passivated diodes
- 150°C junction temp
- Recovery time to 500nS
- Surge rating to 200A
- Modular design for easy stacking
- MIL-PRF-19500 Similarity

**DESCRIPTION**

This series of high voltage, high current rectifiers have a very unique design, which are best used for high power applications.

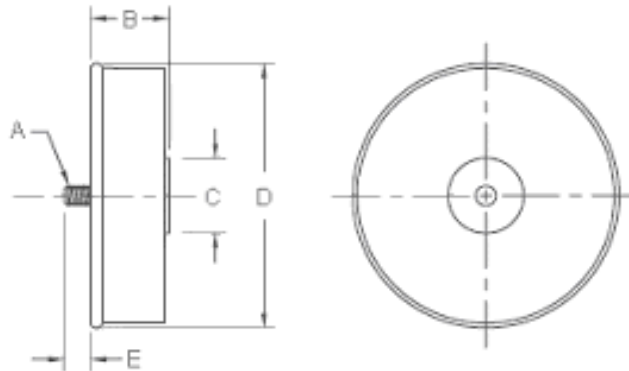
ELECTRICAL CHARACTERISTICS								
	Vrrm	Max Forward Voltage Drop	Max Leakage Current	Max Reverse Recovery Time	Max Average DC Output Current		Non-Repetitive Sinusoidal Surge (8.3ms) Tc =100°C <sup>(5)</sup>	Max Reverse Transient Energy Absorption <sup>(3)</sup>
					Tc=75°C Air Flow	Tc=50°C Oil		
	kV		µA	nS	Amps	Amps	Amps	Joules
<b>Standard Recovery</b>								
UDE2.5	2.5	5V @3.00A	10	-	<sup>(4)</sup> 6.00	7.70	200	8
UDB2.5	2.5	4V @1.50A	5	-	3.00	4.25	100	4
UDE5	5	10V @2.20A	10	-	<sup>(4)</sup> 4.50	5.50	200	14
UDB5	5	8V @1.00A	5	-	2.00	2.75	100	8
UDA5	5	8V @0.82A	2	-	1.65	2.20	30	1.5
UDB7.5	7.5	12V @0.70A	5	-	1.33	2.00	100	12
UDA7.5	7.5	12V @0.60A	2	-	1.25	1.75	30	2.5
UDA10	10	16V @0.50A	2	-	1.00	1.40	30	3
UDA15	15	25V @0.33A	2	-	0.67	0.90	30	5
<b>Fast Recovery</b>								
UDF2.5	2.5	6V @2.20A	10		4.50	5.30	150	8
UDD2.5	2.5	6V @1.20A	5		2.25	3.30	80	4
UDF5	5	11V @1.60A	10		3.30	4.40	150	14
UDD5	5	11V @0.75A	5		1.50	2.00	80	8
UDC5	5	10V @0.70A	2	<sup>(1)</sup> 500	1.20	1.70	25	1.5
UDD7.5	7.5	17V @0.50A	5	<sup>(2)</sup> 350	1.00	1.50	80	12
UDC7.5	7.5	15V @0.50A	2		0.90	1.25	25	2.5
UDC10	10	20V @0.37A	2		0.75	1.00	25	3
UDC15	15	30V @0.25A	2		0.50	0.70	25	5

(1) Measured on discretes prior to assembly in reverse recovery circuit switching from 1.0A forward to 1.0A reverse current recovering to 0.5A.  
 (2) Measured on discretes prior to assembly in reverse recovery circuit switching from 0.5A forward to 1.0A reverse current recovering to 0.25A.  
 (3) Measured on discrete devices prior to assembly  
 (4) Rating based on Tc=100°C  
 (5) Designed to meet



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

**Rectifier Assemblies**  
 High Voltage Doorbell Modules  
 Standard and Fast Recovery  
 UDA, UDB, UDC, UDD, UDE, & UDF SERIES



Dim.	Inches		Millimeters		Notes
	Minimum	Maximum	Minimum	Maximum	
A	-	-	-	-	1/4-28
B	-	.78	-	19.81	-
C	.63 typical		16.08 typical		Diameter
D	-	1.9	-	48.26	Diameter
E	.25 typical		6.35 typical		Typical

Polarity- Cathode connected to base.

<b>THERMAL AND MECHANICAL CHARACTERISTICS</b>			
Storage Temp Range		Tstg	-65°C to 150°C
Operation Junction Temp range		Tj	-65°C to 150°C
Weight- typical			60 grams