



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

Rectifier Assemblies
 Single Phase Bridges, 10-25 Amp
 Standard and Fast Recovery
 PD679, PD680, PD683, PD684 Series

FEATURES

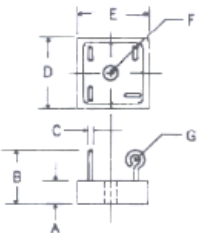
- Current rating: to 25 A
- Recovery Times: to 500 ns
- PIVs: from 100 to 600V
- Surge Ratings: to 150A
- Only Glass Passivated Diodes Used
- Aluminum Heat Sink Case
- Case Electrically Insulated

DESCRIPTION


This series of single-phase bridge offers the designer the ultimate in high current power supply applications. The fast recovery series allows operation at full power at high frequencies, up to 40kHz square wave, which is often used in chopper, inverters and converters in aircraft and missiles.

MECHANICAL SPECIFICATIONS

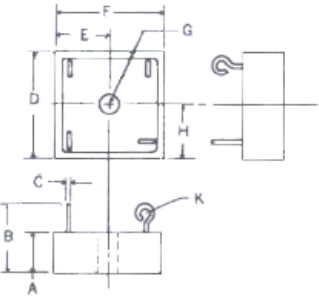
PD680,PD684 SERIES




	ins.	mm.
A	.250 MAX.	6.10 MAX.
B	.57 MAX.	14.45 MAX.
C	.040 TYP.	1.02 TYP.
D	.750 MAX.	19.05 MAX.
E	.750 MAX.	19.05 MAX.
F	.136 TYP.	3.45 TYP.
G	.09 DIA. TYP.	2.29 DIA. TYP.



PD679,PD683 SERIES



	ins.	mm.
A	.328 MAX.	8.33 MAX.
B	.750 MAX.	19.05 MAX.
C	.040 TYP.	1.02 TYP.
D	1.125 MAX.	28.58 MAX.
E	.562	14.27
F	1.125 MAX.	28.58 MAX.
G	.136 TYP.	3.45 TYP.
H	.562	14.27
K	.09 DIA. TYP.	2.29 DIA. TYP.



MARKING (optional)

Alternate Current Input	A.C.	Yellow
Cathode- Positive Output	+	Red
Anode- Negative Output	-	Grey

Specifications subject to change without notice to ensure a better product
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MECHANICAL SPECIFICATIONS (Turret Option)

PD680, PD684 SERIES

	INCHES	mm
A	.250 MAX	6.10 MAX
B	.57 MAX	14.45 MAX
C	.75 MAX	19.05 MAX
D	.75 MAX	19.05 MAX
E	.136 DIA	3.45 DIA
F	.093 TYP	2.36 TYP

PD679, PD683 SERIES

	INCHES	mm
A	.328 MAX	8.33 MAX
B	.750 MAX	19.05 MAX
C	1.125 MAX	28.58 MAX
D	1.125 MAX	28.58 MAX
E	.136 DIA	3.45 DIA
F	.093 TYP	2.36 TYP

For Turret terminal option please add suffix T to end of part number.
 Ex. PD680-1T

MARKING (optional)

Alternate Current Input	A.C.	Yellow
Cathode- Positive Output	+	Red
Anode- Negative Output	-	Grey

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ABSOLUTE MAXIMUM RATINGS

Peak Inverse Voltage.....100 to 600V
 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
 Typical Thermal Resistance Junction to Ambient, PD679, PD683 Series.....20°C/W
 Junction to Ambient, PD680, PD684 Series.....25°C/W
 Junction to Case, PD679, PD683 Series.....2.0°C/W
 Junction to Case, PD680, PD684 Series.....4.0°C/W

ELECTRICAL SPECIFICATIONS (at 25°C unless noted)					MAXIMUM RATINGS			
Type	PIV Per Leg	Maximum Forward Drop Per Leg	Leakage Current Per Leg @ PIV		Maximum Reverse Recovery Time*	Maximum Average D.C. Output Current		Non-Repetitive Sinusoidal Surge (8.3mS)
			T _A = 25°C	T _A =100°C		T _C =25°C	T _C =100°C	
			Volts	µA		µA	nS	Amps
Standard Recovery PD679-1 PD679-2 PD679-3 PD679-4 PD679-5 PD679-6	100 200 300 400 500 600	1.2V @ 10 A	10	200	-	25	18.5	150
Standard Recovery PD680-1 PD680-2 PD680-3 PD680-4 PD680-5 PD680-6	100 200 300 400 500 600	1.2V @ 2A	2	50	-	10	6	50
Fast Recovery PD683-1 PD683-2 PD683-3 PD683-4 PD683-5 PD683-6	100 200 300 400 500 600	1.2V @ 6A	10	200	500	20	14	150
Fast Recovery PD684-1 PD684-2 PD684-3 PD684-4 PD684-5 PD684-6	100 200 300 400 500 600	1.2V @ 2A	5	100	500	10	6	50

*measured in a reverse recovery circuit switching from .5A forward to 1A reverse current recovering to .25A.