5-6 WATT 2:1 WIDE INPUT RANGE DC/DC POWER MODULES

(Rectangle Package)

FEATURES

❶ 5.0 to 6.0 Watt Isolated Output
❷ 2:1 Wide Input Range
❸ High Conversion Efficiency
❹ Continuous Short Circuit Protection

INPUT SPECIFICATIONS

- Voltage .....12, 24, 48 Vdc
- Voltage Range .....9-18, 18-36 & 36-72Vdc
- Input Filter ..... Pi Type

GENERAL SPECIFICATIONS

- Efficiency ..... Per Table
- Switching Frequency ..... 100KHz Min.
- Isolation Voltage: ..... 500 Vdc Min.
- Operating Temperature ..... -25 to +75°C
  Derate Linearly to no load @ 100°C max.
- Case Material:
  500Vdc.....Non-Conductive Black Plastic
  1.5kVdc & 3kVdc.....Black coated copper
  with non-conductive base

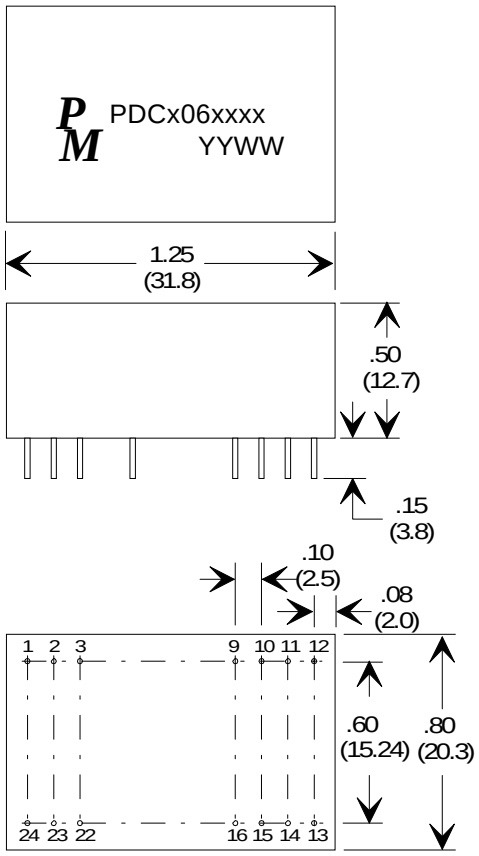
OUTPUT SPECIFICATIONS

- Voltage ..... Per Table
- Initial Voltage Accuracy ..... ±2% Max
- Voltage Stability ..... ±0.05% max
- Ripple & Noise ..... 100/150mV p-p
- Load Regulation (10 to 100% Load)
  Single Output Units: ±0.5%
  Dual Output Units: ±1.0%
- Line Regulation ..... ±0.5% typ.
- Temp Coefficient ..... ±0.05% /°C
- Short Circuit Protection ..... Continuous

PACKAGE

PHYSICAL DIMENSIONS

DIMENSIONS IN inches (mm)



Note: Pin size is 0.02" Inch (0.5mm) DIA or 0.02x0.014 Inch

PIN ASSIGNMENTS

500VDC			1500VDC & 3000VDC		
PIN #	SINGLE OUTPUT	DUAL OUTPUTS	PIN #	SINGLE OUTPUT	DUAL OUTPUTS
1	+ INPUT	+INPUT	1	NP	NP
2	NC	-OUTPUT	2	-INPUT	-INPUT
3	NC	COMMON	3	-INPUT	-INPUT
9	NP	NP	9	NC	COMMON
10	-OUTPUT	COMMON	10	NC	NC
11	+OUTPUT	+OUTPUT	11	NC	-OUTPUT
12	-INPUT	-INPUT	12	NP	NP
13	-INPUT	-INPUT	13	NP	NP
14	+OUTPUT	+OUTPUT	14	+OUTPUT	+OUTPUT
15	-OUTPUT	COMMON	15	NC	NC
16	NP	NP	16	-OUTPUT	COMMON
22	NC	COMMON	22	+INPUT	+INPUT
23	NC	-OUTPUT	23	+INPUT	+INPUT
24	+INPUT	+INPUT	24	NP	NP

*NP-NO PIN
*NC-NO CONNECTION WITH PIN

Specifications subject to change without notice.

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ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -25°C TO +75°C

PART NUMBER (Note #1)	Premier Magnetics Old Part # (Note #2)	INPUT VOLTAGE		OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mAdc)	INPUT CURRENT		TYPICAL EFFICIENCY
		NOMINAL	RANGE			NO LOAD (mA)	FULL LOAD (mA)	
PDCS06001	E1AS1203NX	12	9-18	3.3	1000	7.5	405	68 %
PDCS06002	E1AS1205NX	12	9-18	5	1000	7.5	545	76 %
PDCS06003	E1AS1212NX	12	9-18	12	470	7.5	585	80 %
PDCS06004	E1AS1215NX	12	9-18	15	400	7.5	625	80 %
PDCD06002	E1AD1205NX	12	9-18	±5	±500	12	545	76 %
PDCD06003	E1AD1212NX	12	9-18	±12	±230	12	575	80 %
PDCD06004	E1AD1215NX	12	9-18	±15	±190	12	590	80 %
PDCS06011	E1AS2403NX	24	18-36	3.3	1000	5	195	70 %
PDCS06012	E1A24S05NX	24	18-36	5	1000	5	265	78 %
PDCS06013	E1AS2412NX	24	18-36	12	470	5	285	82 %
PDCS06014	E1AS2415NX	24	18-36	15	400	5	305	82 %
PDCD06012	E1AD2405NX	24	18-36	±5	±500	7.5	265	78 %
PDCD06013	E1AD2412NX	24	18-36	±12	±230	7.5	285	81 %
PDCD06014	E1AD2415NX	24	18-36	±15	±190	7.5	295	81 %
PDCS06021	E1AS4803NX	48	36-72	3.3	1000	2	98	70 %
PDCS06022	E1AS4805NX	48	36-72	5	1000	2	133	78 %
PDCS06023	E1AS4812NX	48	36-72	12	470	2	145	81 %
PDCS06024	E1AS4815NX	48	36-72	15	400	2	154	81 %
PDCD06022	E1AD4805NX	48	36-72	±5	±500	3	265	78 %
PDCD06023	E1AD4812NX	48	36-72	±12	±230	3	142	81 %
PDCD06024	E1AD4815NX	48	36-72	±15	±190	3	147	81 %

NOTE #1:
PDCx06xxx_ : FOR STANDARD PART WITH ISOLATION = 500VDC
PDCx06xxxK : ADD "K" FOR PART WITH ISOLATION = 1500VDC
PDCx06xxxQ : ADD "Q" FOR PART WITH ISOLATION = 3000VDC

NOTE #2: *(FOR PREMIER MAGNETICS OLD PART #)*
E1AXXXXXNX : FOR STANDARD PART WITH ISOLATION = 500VDC
E1AXXXXXNM : FOR PART WITH ISOLATION = 1500VDC
E1AXXXXXNT : FOR PART WITH ISOLATION = 3000VDC

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