



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

## Remote ON/OFF Option (Rectangle Package)

### FEATURES

- 5.0 to 6.0 Watt Isolated Output
- 2:1 Wide Input Range
- High Conversion Efficiency
- Continuous Short Circuit Protection
- Remote ON/OFF Option \*

### 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
- EMI/RFI..... Conductive EMI meet  
EN55022 Class B

### INPUT SPECIFICATIONS

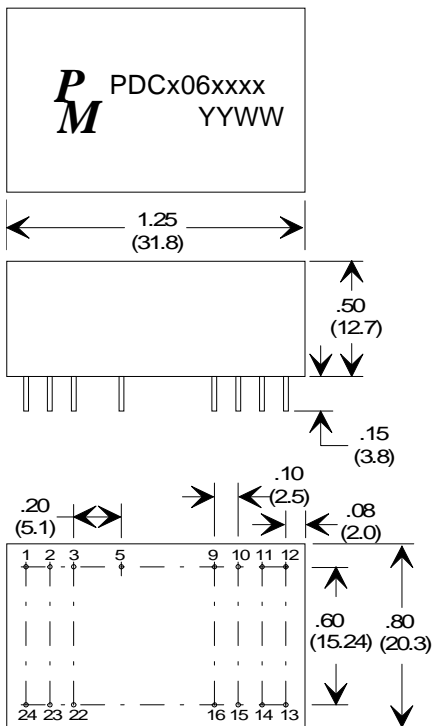
- Voltage .....12, 24, 48 Vdc
- Voltage Range .....9-18, 18-36 & 36-72Vdc
- Input Filter ..... Pi Type

### OUTPUT SPECIFICATIONS

- Voltage ..... Per Table
- Initial Voltage Accuracy ..... ±2% Max
- Voltage Stability ..... ±0.05% max
- Ripple&Noise ..3.3&5/12&15...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

#### REMOTE ON/OFF CONTROL

Logic	CMOS or Open Collector TTL
Ec-On	>+5.5VDC or Open Circuit
Ec-Off	<1.8VDC
Shutdown Idle Current	10mA
Input Resistance	100K Ohm
Control Common	Referenced to Input Minus

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
5	NP	NP	5	NP	R(ON/OFF)
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



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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	
PDCS06031	E2AS1203NX	12	9-18	3.3	1000	7.5	405	68 %
PDCS06032	E2AS1205NX	12	9-18	5	1000	7.5	545	76 %
PDCS06033	E2AS1212NX	12	9-18	12	470	7.5	585	80 %
PDCS06034	E2AS1215NX	12	9-18	15	400	7.5	625	80 %
PDCD06032	E2AD1205NX	12	9-18	±5	±500	12	545	76 %
PDCD06033	E2AD1212NX	12	9-18	±12	±230	12	575	80 %
PDCD06034	E2AD1215NX	12	9-18	±15	±190	12	590	80 %
PDCS06041	E2AS2403NX	24	18-36	3.3	1000	5	195	70 %
PDCS06042	E2AS2405NX	24	18-36	5	1000	5	265	78 %
PDCS06043	E2AS2412NX	24	18-36	12	470	5	285	82 %
PDCS06044	E2AS2415NX	24	18-36	15	400	5	305	82 %
PDCD06042	E2AD2405NX	24	18-36	±5	±500	7.5	265	78 %
PDCD06043	E2AD2412NX	24	18-36	±12	±230	7.5	285	81 %
PDCD06044	E2AD2415NX	24	18-36	±15	±190	7.5	295	81 %
PDCS06051	E2AS4803NX	48	36-72	3.3	1000	2	98	70 %
PDCS06052	E2AS4805NX	48	36-72	5	1000	2	133	78 %
PDCS06053	E2AS4812NX	48	36-72	12	470	2	145	81 %
PDCS06054	E2AS4815NX	48	36-72	15	400	2	154	81 %
PDCD06052	E2AD4805NX	48	36-72	±5	±500	3	265	78 %
PDCD06053	E2AD4812NX	48	36-72	±12	±230	3	142	81 %
PDCD06054	E2AD4815NX	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

**PDCx06xxxR :** ADD "R" FOR PART WITH ISOLATION = 3000VDC AND REMOTE ON/OFF

**NOTE #2: (FOR PREMIER MAGNETICS OLD PART #)**

**E2AXXXXXNX :** FOR STANDARD PART WITH ISOLATION = 500VDC

**E2AXXXXXNM :** FOR PART WITH ISOLATION = 1500VDC

**E2AXXXXXNT :** FOR PART WITH ISOLATION = 3000VDC

**E2AXXXXXTR :** FOR PART WITH ISOLATION = 3000VDC AND REMOTE ON/OFF