

P 1.5Watt Series DC/DC Converters

P 1R5

Total power	1.5 Watts
Input voltages	5V, 12V, 24V, 48V Input
# of outputs	Single , Dual Output



SPECIAL FEATURES

- High efficiency
- 300KHz fixed frequency
- Wide 2 : 1 input range
- Isolated output
- Surface mounting technology
- Small, compact size 1.3" x 0.83" x 0.4"
- Current mode control
- Output low ripple and noise
- Low start up current
- 3 years warranty

ENVIRONMENTAL

- Operating temperature range..... -20°C ~ 71°C
- Option, see Note 1..... -40°C ~ 85°C
- Storage temperature range..... -40°C ~ 105°C
- Operating humidity (non condensing).....20% ~ 90%RH
- Storage humidity (non condensing).....10% ~ 95%RH
- Cooling methodconvection
- Case materialZn
- MTBF 7.9 x 10⁵ hrs

NOTE

- As a factory added option, the all model can be operated down to -40°C, the suffix 'M' should be added to the model number when ordering e.x PS1R5-24-5M
- Long term continuous operation into a short circuit will compromise the reliability of the unit

ELECTRICAL SPECIFICATIONS

- INPUT**
- Input range4.5V to 7.2 VDC , 8V to 16.5 VDC
18 to 32 VDC , 32V to 63 VDC
 - Efficiency69 ~ 77% typ.
- OUTPUT**
- Voltage tolerance ±2%
 - Line regulation ±0.5%
 - Load regulation ±1% @ single
±2.5% @ dual (minimum load 10%)
 - Ripple and Noise, pk-pk Bandwidth : 20MHz
Magnitude : 1% Vout nom

PROTECTION CIRCUIT

Short circuit protection Current limited output @ note2

ELECTRICALLY ISOLATED

- Isolation Input-output, input-case, output-case
DC 500V, 100Mohms
- High pot Input-output, input-case, output-case
AC 500V, 1 minute

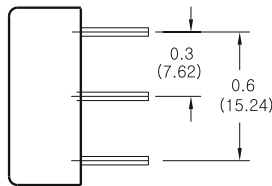
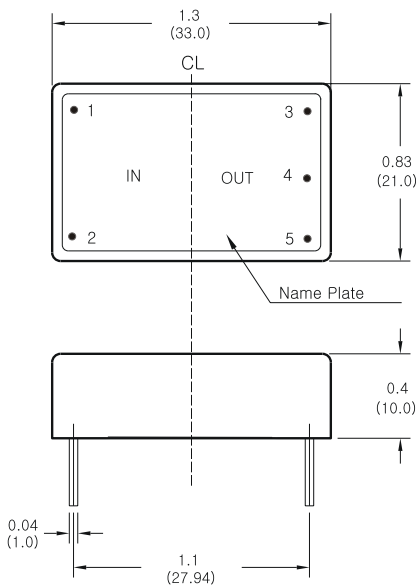
Ordering Information

Input	Output 1	Output 2	Output 3	Maximum Power	Ripple & Noise (mVp-p)	Efficiency Typ.	Model number
4.5-7.2V	3.3V@0.3A			0.99W	50	67%	PS1R5-5-3.3
4.5-7.2V	5V@0.3A			1.5W	50	67%	PS1R5-5-5
4.5-7.2V	12V@0.125A			1.5W	120	67%	PS1R5-5-12
4.5-7.2V	15V@0.1A			1.5W	150	67%	PS1R5-5-15
4.5-7.2V	+12V@0.06A	-12V@0.06A		1.44W	120/120	67%	PD1R5-5-1212
4.5-7.2V	+15V@0.05A	-15V@0.05A		1.5W	150/150	67%	PD1R5-5-1515
8-16.5V	3.3V@0.3A			0.99W	50	76%	PS1R5-12-3.3
8-16.5V	5V@0.3A			1.5W	50	76%	PS1R5-12-5
8-16.5V	12V@0.125A			1.5W	120	76%	PS1R5-12-12
8-16.5V	15V@0.1A			1.5W	150	76%	PS1R5-12-15
8-16.5V	+12V@0.06A	-12V@0.06A		1.44W	120/120	75%	PD1R5-12-1212
8-16.5V	+15V@0.05A	-15V@0.05A		1.5W	150/150	75%	PD1R5-12-1515
18-32V	3.3V@0.3A			0.99W	50	77%	PS1R5-24-3.3
18-32V	5V@0.3A			1.5W	50	77%	PS1R5-24-5
18-32V	12V@0.125A			1.5W	120	77%	PS1R5-24-12
18-32V	15V@0.1A			1.5W	150	77%	PS1R5-24-15
18-32V	+12V@0.06A	-12V@0.06A		1.44W	120/120	76%	PD1R5-24-1212
18-32V	+15V@0.05A	-15V@0.05A		1.5W	150/150	76%	PD1R5-24-1515
32-63V	3.3V@0.3A			0.99W	50	77%	PS1R5-48-3.3
32-63V	5V@0.3A			1.5W	50	77%	PS1R5-48-5
32-63V	12V@0.125A			1.5W	120	77%	PS1R5-48-12
32-63V	15V@0.1A			1.5W	150	77%	PS1R5-48-15
32-63V	+12V@0.06A	-12V@0.06A		1.44W	120/120	76%	PD1R5-48-1212
32-63V	+15V@0.05A	-15V@0.05A		1.5W	150/150	76%	PD1R5-48-1515

Pin assignments

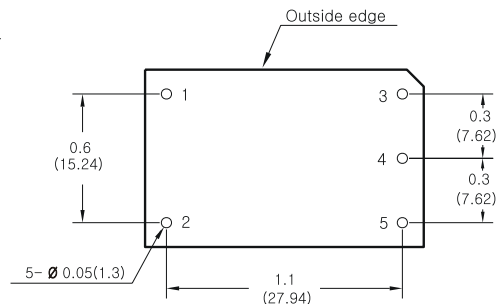
Single Output	Dual Output
1. +Vin	1. +Vin
2. -Vin	2. -Vin
3. Output 1	3. Output 1
4. No pin	4. COM
5. Gnd	5. Output 2

Dimensions



Notes

- All dimensions are in inches and (mm).
- Weight : 12g or less



* MOUNTING HOLE
TOP VIEW