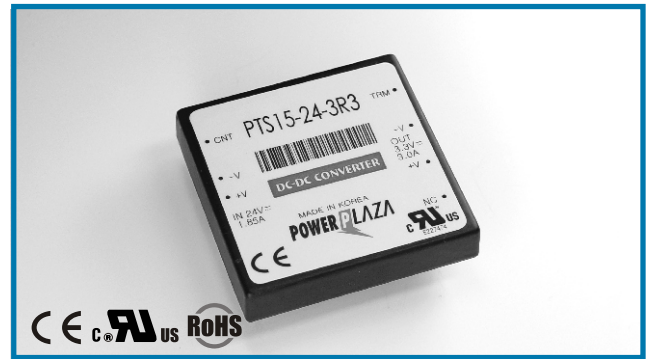


PT 15

PT 15 Watt Series DC/DC Converters

Total power 15 Watts
Input voltages 24V, 48V
#of outputs Single, Dual, Triple Output



SPECIAL FEATURES

- CE(LVD), UL marking
- High efficiency
- Industrial standard pin out
- 250KHz fixed frequency
- Wide 4:1 input range
- Isolated output
- Small, compact size 2.0" x 2.0" x 0.40"
- Surface mount internal construction
- Six sided EMI shielding
- Low output ripple & noise
- Remote on / off control
- Output voltage variation (TRM)
- Over voltage protection (O.V.P.)
- Current mode control
- 3 years warranty

ENVIRONMENTAL

- Operating temperature range -20 ~71
- Option, see Note 1 -40 ~85
- Storage temperature range -40 ~105
- Operating humidity (non condensing) 20%~90%RH
- Storage humidity (non condensing) 10%~95%RH
- Cooling method Convection
- EMI / RFI Six-sided continuous shield
- Case material Zn
- MTBF (MIL-HDBK-217F) 5.0×10^5 hrs
- Safety
 - └ UL (UL 60950, CSA C22.2 NO.60950, single) : E227474 /
 - └ CE (EN 60950) through TÜV

ELECTRICAL SPECIFICATIONS

INPUT	<ul style="list-style-type: none"> · Input range DC 10V - 36V (PT 15-24), DC 20V - 72 V (PT 15-48) · Efficiency 80 - 87% typ. · Remote on / off TTL compatible <ul style="list-style-type: none"> └ On : 2.5 to 5.5VDC or open └ Off : 0 to 0.8 VDC
OUTPUT	<ul style="list-style-type: none"> · Voltage tolerance $\pm 2\%$ (single and uncomplementary dual) $\pm 3\%$ (complementary dual) · Line regulation $\pm 0.25\%$ @ output1 $\pm 5\%$ @ output2, 3 · Load regulation $\pm 0.25\%$ @ single $\pm 2.5\%$ @ dual $\pm 0.25\%$ output1 $\pm 8\%$ output 2, 3 } @ Triples / 50% L-FL max (aux) bal. Loads · Ripple and Noise, pk-pk Bandwidth : 20MHz Magnitude : 1% Vout nom
PROTECTION CIRCUIT	<ul style="list-style-type: none"> · Short circuit protection Current limited output (note2) · Over voltage protection Work at 115 ~ 140% of rating
ELECTRICALLY ISOLATED	<ul style="list-style-type: none"> · Isolation Input-output, input-case, output-case / DC 500V, 100Mohms · High pot Input-output, input-case, output-case / AC 500V, 1minute

NOTE 1. As a factory added option, the all model can be operated down to -40 , the suffix 'M' should be added to the model number when ordering. ex) PTS15-48-522M
 2. Long term continuous operation into a short circuit will compromise the reliability of the unit.

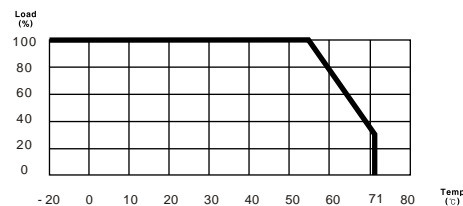
Ordering Information

Input	Output1	Output2	Output3	Maximum Power	Ripple&Noise max	Efficiency Typ.	Model Number
10 - 36V	3.3V@4.00A			13.2W	75mVp-p	80%	PTS15-24-3R3
10 - 36V	5V@3.00A			15.0W	75mVp-p	85%	PTS15-24-5
10 - 36V	12V@1.25A			15.0W	120mVp-p	86%	PTS15-24-12
10 - 36V	15V@1.00A			15.0W	150mVp-p	84%	PTS15-24-15
10 - 36V	5V@1.50A	-5V@1.50A		15.0W	50/50mVp-p	85%	PTD15-24-55
10 - 36V	12V@0.625A	-12V@0.625A		15.0W	120/120mVp-p	87%	PTD15-24-1212
10 - 36V	15V@0.50A	-15V@0.50A		15.0W	150/150mVp-p	87%	PTD15-24-1515
10 - 36V	3.3V@2.0A	12V@0.31A	-12V@0.31A	12.39W	50/120/120mVp-p	83%	PT15-24-322
10 - 36V	5V@1.50A	12V@0.31A	-12V@0.31A	15.0W	50/120/120mVp-p	84%	PT15-24-522
10 - 36V	3.3V@2.0A	15V@0.25A	-15V@0.25A	12.45W	50/150/150mVp-p	83%	PT15-24-3FF
10 - 36V	5V@1.50A	15V@0.25A	-15V@0.25A	15.0W	50/150/150mVp-p	84%	PT15-24-5FF
20 - 72V	3.3V@4.00A			13.2W	75mVp-p	80%	PTS15-48-3R3
20 - 72V	5V@3.00A			15.0W	75mVp-p	85%	PTS15-48-5
20 - 72V	12V@1.25A			15.0W	120mVp-p	87%	PTS15-48-12
20 - 72V	15V@1.00A			15.0W	150mVp-p	87%	PTS15-48-15
20 - 72V	5V@1.50A	-5V@1.50A		15.0W	50/50mVp-p	85%	PTD15-48-55
20 - 72V	12V@0.625A	-12V@0.625A		15.0W	120/120mVp-p	86%	PTD15-48-1212
20 - 72V	15V@0.50A	-15V@0.50A		15.0W	150/150mVp-p	87%	PTD15-48-1515
20 - 72V	3.3V@2.0A	12V@0.31A	-12V@0.31A	12.39W	50/120/120mVp-p	83%	PT15-48-322
20 - 72V	5V@1.50A	12V@0.31A	-12V@0.31A	15.0W	50/120/120mVp-p	84%	PT15-48-522
20 - 72V	3.3V@2.0A	15V@0.25A	-15V@0.25A	12.45W	50/150/150mVp-p	83%	PT15-48-3FF
20 - 72V	5V@1.50A	15V@0.25A	-15V@0.25A	15.0W	50/150/150mVp-p	84%	PT15-48-5FF

Pin assignments

Single Output	Dual Output	Triple Output
1. +Vin	1. +Vin	1. +Vin
2. - Vin	2. - Vin	2. - Vin
3. No pin	3. No pin	3. No pin
4. Control(enable)	4. Control(enable)	4. Control(enable)
5. No connect	5. Output1	5. Output2
6. +Vout	6. COM	6. Output1
7. -Vout	7. Output2	7. GND
8. Trim	8. Trim	8. Output3

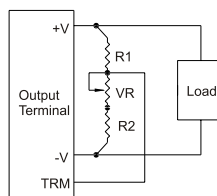
Derating curve



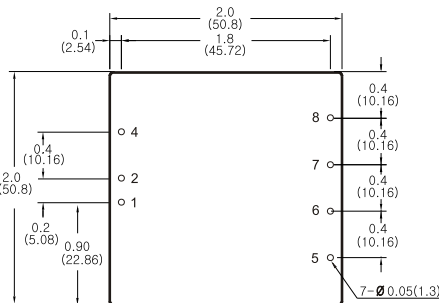
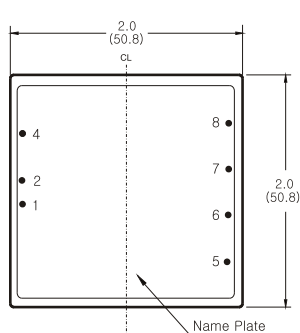
External Parts

Model	Output Voltage	VR	R1	R2
PTS 15	5V	1K	1.0K	680
	12V	1K	3.9K	680
	15V	1K	5.6K	750
PTD 15	± 5V (10V)	1K	3.3K	680
	± 12V (24V)	5K	9.0K	820
	± 15V (30V)	5K	20.0K	910

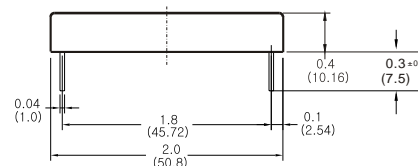
Trim method



Dimensions



Mounting hole top view



NOTES

1. All dimensions are in inches and(mm).
2. Weight : 75g or less