

PT 25

PT 25 Watt Series DC/DC Converters

Total power 25 Watts
Input voltages 24V or 48V Input
#of outputs Single, Dual, Triple Output



SPECIAL FEATURES

- CE(LVD), UL marking
- High efficiency
- Industrial standard pin output
- 300KHz fixed frequency
- Wide 2:1 input range
- Isolated output
- Small, compact size 2.0" × 2.0" × 0.50"
- 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)
- Short circuit protection
- Current mode control
- 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 method Convection
- EMI / RFI Six-sided continuous shield
- Case material Zn
- MTBF 4.5 × 10⁵ hrs
- Safety(single output)
 - └ UL (UL 60950, CSA C22.2 NO.60950) : E227474 /
 - └ CE (EN 60950) through TÜV

ELECTRICAL SPECIFICATIONS

INPUT	<ul style="list-style-type: none"> • Input range 18V to 36 VDC (PT 25-24), 36 to 72 VDC (PT 25-48) • Efficiency 77 ~ 83% 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 ±2% (single and uncomplementary dual) ±3% (complementary dual) • Line regulation ±0.25% @ output1 ±5% @ output 2, 3 • Load regulation ±0.25% @ single ±2.5% @ dual ±0.25% output1 ±5% output 2, 3] @ Triples / 10% 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% or 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, 1 minute

NOTE 1. 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 ex) PT25-48-522M
 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
18 - 36V	3.3V@6.0A			19.8W	100mVp-p	78%	PTS25-24-3R3
18 - 36V	5V@5.0A			25.0W	100mVp-p	79%	PTS25-24-5
18 - 36V	12V@2.0A			24.0W	120mVp-p	81%	PTS25-24-12
18 - 36V	15V@1.6A			24.0W	150mVp-p	81%	PTS25-24-15
18 - 36V	5V@2.5A	-5V@2.50A		25.0W	75/75mVp-p	79%	PTD25-24-55
18 - 36V	12V@1.0A	-12V@1.00A		24.0W	120/120mVp-p	81%	PTD25-24-1212
18 - 36V	15V@0.8A	-15V@0.80A		24.0W	150/150mVp-p	81%	PTD25-24-1515
18 - 36V	3.3V@3.5A	12V@0.35A	-12V@0.35A	19.95W	75/120/120mVp-p	77%	PT25-24-322
18 - 36V	5V@3.5A	12V@0.35A	-12V@0.35A	25.9W	75/120/120mVp-p	77%	PT25-24-522
18 - 36V	3.3V@3.5A	15V@0.28A	-15V@0.28A	19.95W	75/150/150mVp-p	77%	PT25-24-3FF
18 - 36V	5V@3.5A	15V@0.25A	-15V@0.25A	25.0W	75/150/150mVp-p	78%	PT25-24-5FF
36 - 72V	3.3V@6.0A			19.8W	100mVp-p	78%	PTS25-48-3R3
36 - 72V	5V@5.0A			25.0W	100mVp-p	79%	PTS25-48-5
36 - 72V	12V@2.0A			24.0W	120mVp-p	83%	PTS25-48-12
36 - 72V	15V@1.6A			24.0W	150mVp-p	83%	PTS25-48-15
36 - 72V	5V@2.5A	-5V@2.50A		25.0W	75/75mVp-p	80%	PTD25-48-55
36 - 72V	12V@1.0A	-12V@1.00A		24.0W	120/120mVp-p	82%	PTD25-48-1212
36 - 72V	15V@0.8A	-15V@0.80A		24.0W	150/150mVp-p	82%	PTD25-48-1515
36 - 72V	3.3V@3.5A	12V@0.35A	-12V@0.35A	19.95W	75/120/120mVp-p	77%	PT25-48-322
36 - 72V	5V@3.5A	12V@0.35A	-12V@0.35A	25.9W	75/120/120mVp-p	78%	PT25-48-522
36 - 72V	3.3V@3.5A	15V@0.28A	-15V@0.28A	19.95W	75/150/150mVp-p	77%	PT25-48-3FF
36 - 72V	5V@3.5A	15V@0.25A	-15V@0.25A	25.0W	75/150/150mVp-p	79%	PT25-48-5FF

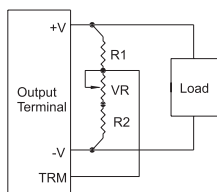
Pin assignments

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 connet	5. Output1	5. Output2
6. +Vout	6. COM	6. Output1
7. -Vout	7. Output2	7. GND
8. Trim	8. Trim	8. Output3

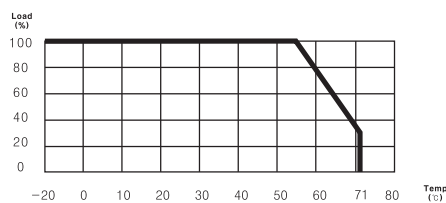
External Parts

Model	Output Voltage	VR	R1	R2
PTS 25	5V	1K	1K	680Ω
	12V	1K	3.9K	680Ω
	15V	1K	5.6K	750Ω
PTD 25	±5V (10V)	1K	3.3K	680Ω
	±12V (24V)	5K	9.0K	820Ω
	±15V (30V)	5K	20.0K	910Ω

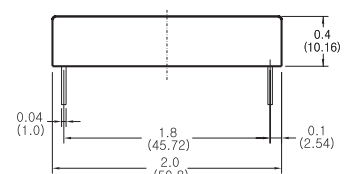
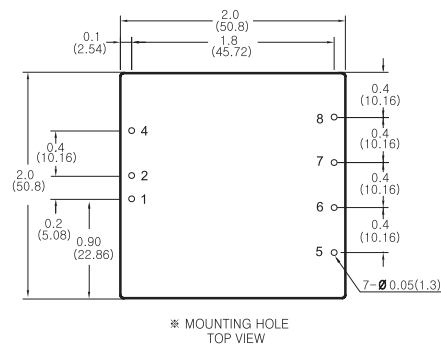
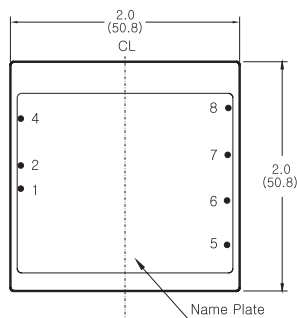
Trim method



Derating curve



Dimensions



NOTES

- All dimensions are in inches and (mm).
- Weight : 80g or less