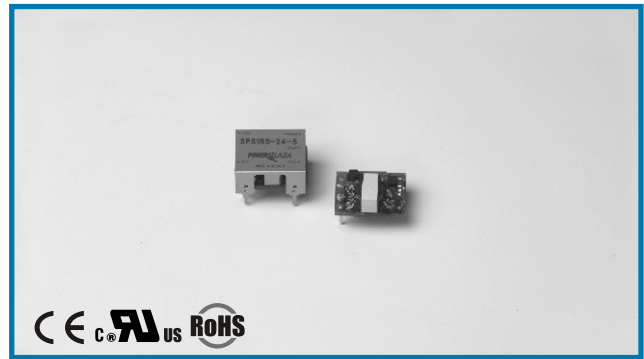


SPS1R5

Small size Isolated DC/DC Converters

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



SPECIAL FEATURES

- High efficiency
- Wide operating temperature range (-40 ~+85)
- Small size & Light weight
- Wide 2:1 input range
- Built - in over current protection circuit
- Input - Output Isolated
- Trimmable output voltage (single output)
- Open case type
- Long Life Design (employ only ceramic capacitor)
- 5years warranty

ENVIRONMENTAL

- Operating temperature range -40 ~85
- Storage temperature range -40 ~105
- Operating humidity (non consensing) 5% ~ 95%
- Storage humidity (non consensing) 5% ~ 95%
- Cooling method convection, forced air
- MTBF (MIL-HDBK-217F) 9×10^5 hrs
- Safety UL(pending)
CE(pending)

ELECTRICAL SPECIFICATIONS

INPUT	<ul style="list-style-type: none"> · Input range DC 4.5V - 9V, 9V - 18V, 18V - 36V, 36V - 76V · Efficiency 73% - 81% · Remote on/off on : short to - Vin off : open
OUTPUT	<ul style="list-style-type: none"> · Voltage tolerance $\pm 2\%$(Single) $\pm 3\%$(Daul) · Line Reg $\pm 0.5\%$ · Load Reg $\pm 1\%$ · Ripple & Noise 1% of Vout (Bandwidth : 20MHz)
PROTECTION CIRCUIT	<ul style="list-style-type: none"> · Short circuit protection Current Limited Output
ELECTRICALLY ISOLATED	<ul style="list-style-type: none"> · Isolation input - output, input - case, output - case / DC500V,100Mohms · High pot input - output, input - case, output - case / AC500V, 1Min

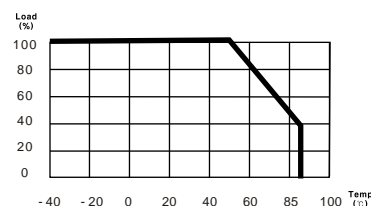
Ordering Information

Input	Output1	Output2	Maximum Power	Ripple&Noise max	Efficiency Typ.	Model Number
4.5 - 9V	3.3V@0.4A		1.32W	50mVp-p	73%	SPS1R5-5-3R3
4.5 - 9V	5V@0.3A		1.5W	50mVp-p	78%	SPS1R5-5-5
4.5 - 9V	12V@0.13A		1.56W	120mVp-p	81%	SPS1R5-5-12
4.5 - 9V	15V@0.1A		1.5W	150mVp-p	81%	SPS1R5-5-15
4.5 - 9V	+12V@0.065A	-12V@0.065A	1.56W	120mVp-p	81%	SPD1R5-5-1212
4.5 - 9V	+15V@0.050A	-15V@0.050A	1.5W	150mVp-p	81%	SPD1R5-5-1515
9 - 18V	3.3V@0.4A		1.32W	50mVp-p	73%	SPS1R5-12-3R3
9 - 18V	5V@0.3A		1.5W	50mVp-p	78%	SPS1R5-12-5
9 - 18V	12V@0.13A		1.56W	120mVp-p	81%	SPS1R5-12-12
9 - 18V	15V@0.1A		1.5W	150mVp-p	81%	SPS1R5-12-15
9 - 18V	+12V@0.065A	-12V@0.065A	1.56W	120mVp-p	81%	SPD1R5-12-1212
9 - 18V	+15V@0.050A	-15V@0.050A	1.5W	150mVp-p	81%	SPD1R5-12-1515
18 - 36V	3.3V@0.4A		1.32W	50mVp-p	73%	SPS1R5-24-3R3
18 - 36V	5V@0.3A		1.5W	50mVp-p	78%	SPS1R5-24-5
18 - 36V	12V@0.13A		1.56W	120mVp-p	81%	SPS1R5-24-12
18 - 36V	15V@0.1A		1.5W	150mVp-p	81%	SPS1R5-24-15
18 - 36V	+12V@0.065A	-12V@0.065A	1.56W	120mVp-p	81%	SPD1R5-24-1212
18 - 36V	+15V@0.050A	-15V@0.050A	1.5W	150mVp-p	81%	SPD1R5-24-1515
36 - 76V	3.3V@0.4A		1.32W	70mVp-p	73%	SPS1R5-48-3R3
36 - 76V	5V@0.3A		1.5W	70mVp-p	78%	SPS1R5-48-5
36 - 76V	12V@0.13A		1.56W	120mVp-p	81%	SPS1R5-48-12
36 - 76V	15V@0.1A		1.5W	150mVp-p	81%	SPS1R5-48-15
36 - 76V	+12V@0.065A	-12V@0.065A	1.56W	120mVp-p	81%	SPD1R5-48-1212
36 - 76V	+15V@0.050A	-15V@0.050A	1.5W	150mVp-p	81%	SPD1R5-48-1515

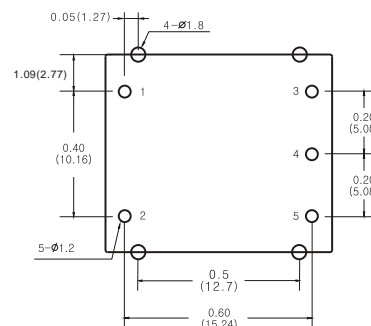
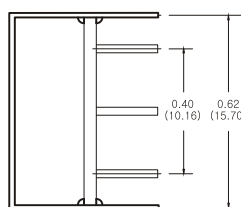
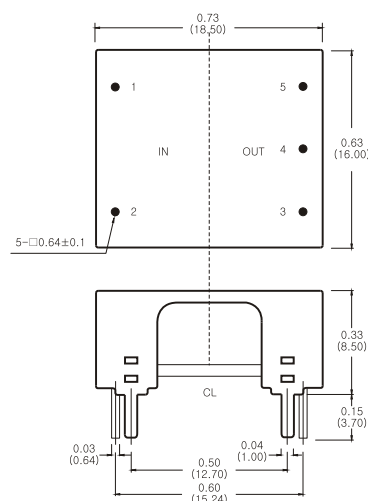
Pin assignments

Single Output	Dual Output
1. +Vin	1. +Vin
2. -Vin	2. -Vin
3. Trim	3. -Vout
4. -Vout	4. COM
5. +Vout	5. +Vout

Derating Curve



Dimensions



Mounting hole top view

NOTES

1. All dimensions are in inches and(mm).
2. Weight : 3.3g or less