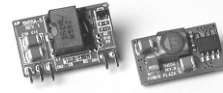


SNS5A

Non-isolated DC/DC POL converter

Total output current **5 A**
Input voltages **5V, 12V**
#of outputs **Single output**



SPECIAL FEATURES

- Delivers 5A of output Current
- High efficiency
- Low Output Ripple & Noise
- Small size and low profile 22.86mm x 13.97mm x 8.64mm (SIP package)
- Cost-efficient open frame design
- Single - in - line (SIP) & SMT package
- Remote ON/OFF
- Trimmable output voltage via external resistor
- Output Over current protection
- Over temperature protection
- Wide Operating temperature range -40 ~85

ELECTRICAL SPECIFICATIONS

SNS 5A - 5 SIP Packages

- Efficiency 94% @ 3.3V
- Input voltage range 3.0V - 5.5V
- Output voltage 1.0V - 3.3V
- Voltage tolerance $\pm 2.0\%$
- Line regulation $\pm 0.3\%$
- Load regulation $\pm 0.4\%$
- Switching frequency 300KHz
- *Ripple & noise 30mVp-p (@3.3V)
- MTBF (MIL-HDBK-217F) 1.5×10^6 hrs

SNS 5A - 12 SIP Packages

- Efficiency 93% @ 5.0V
- Input voltage range 10.0V - 14.0V
- Output voltage 1.0V - 5.0V
- Voltage tolerance $\pm 2.0\%$
- Line regulation $\pm 0.3\%$
- Load regulation $\pm 0.4\%$
- Switching frequency 300KHz
- *Ripple & noise 50mVp-p (@5V)
- MTBF(MIL-HDBK-217F) 1.5×10^6 hrs

* Ripple & noise is tested / specified over a 20MHz bandwidth and may be reduced with external filtering.

Ordering Information

Input	Output	Maximum Power	Ripple & Noise max	Efficiency Typ.	Model Number
3.0-5.5V	1.0V@5A	5.0W	30mVp-p	82%	SNS5A-5-1R0
3.0-5.5V	1.5V@5A	7.5W	30mVp-p	87%	SNS5A-5-1R5
3.0-5.5V	1.8V@5A	9.0W	30mVp-p	88%	SNS5A-5-1R8
3.0-5.5V	2.0V@5A	10.0W	30mVp-p	89%	SNS5A-5-2R0
3.0-5.5V	2.5V@5A	12.0W	30mVp-p	91%	SNS5A-5-2R5
4.5-5.5V	3.3V@5A	16.5W	30mVp-p	94%	SNS5A-5-3R3
10-14V	1.0V@5A	5.0W	50mVp-p	78%	SNS5A-12-1R0
10-14V	1.5V@5A	7.5W	50mVp-p	84%	SNS5A-12-1R5
10-14V	1.8V@5A	9.0W	50mVp-p	85%	SNS5A-12-1R8
10-14V	2.5V@5A	12.0W	50mVp-p	89%	SNS5A-12-2R5
10-14V	3.3V@5A	16.5W	50mVp-p	91%	SNS5A-12-3R3
10-14V	5.0V@5A (12V Input SIP Package only)	25.0W	50mVp-p	93%	SNS5A-12-5R0

1. Typical at $T_a = +25^\circ\text{C}$ under nominal line voltage and full load conditions, unless otherwise noted. All models are tested and specified with external input and output capacitors. ($C_{in} = 100\mu\text{F}$ X2 $C_{out} = 10\mu\text{F}$). These capacitors are necessary to accommodate our test equipment
2. Ripple & Noise is tested / specified over a 20MHz bandwidth and may be reduced with external filtering. See I/O Filtering
3. These devices have no minimum-load requirement and will regulate under no-load conditions. Regulation specifications describe the output voltage deviation as the line voltage or load is varied from its minimum value to either extreme.

Pin assignment

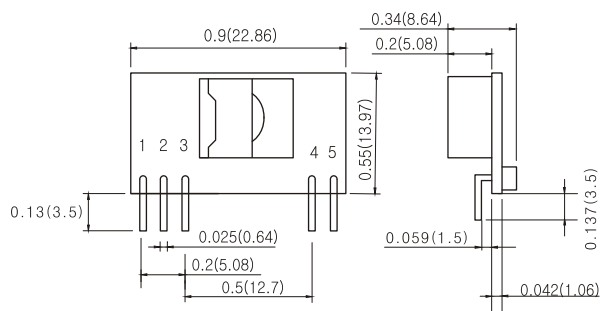
Single Output (SIP)

1. +Vout
2. Trim
3. COM
4. +Vin
5. ON/OFF

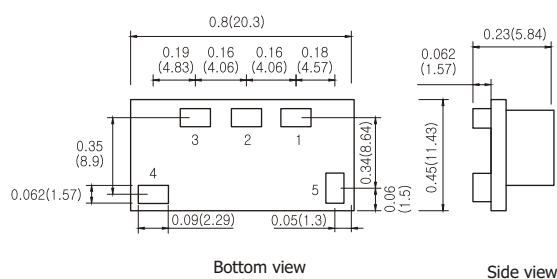
Single Output (SMT)

1. +Vout
2. Trim
3. COM
4. +Vin
5. ON/OFF

Dimensions



<SIP TYPE>



<SMT TYPE>

NOTES

1. All dimensions are in inches (mm)
2. Weight : 3.5g or less (SIP)
2.4g or less (SMT)