

SNS5A Series

NON-ISOLATED DC-DC POL CONVERTER



FEATURES 5V, 12V Inputs

- Delivers 5A of Output Current
- High Efficiency
- Compact Footprint / Low Profile
- Single-in-Line SIP / SMT Package
- Cost-Efficient Open Frame Design
- Remote On/Off Control (CNT) (Active Low)
- Trimmable Output Voltage via External Resistor
- Low Output Ripple / Noise
- Over Current Protection (OCP)
- Over Temperature Protection (OTP)
- 3 Year Warranty



ELECTRICAL SPECIFICATIONS

SNS5A - 5 Packages

- Input Range 5V(3.0 - 5.5V)
4.5 - 5.5V (Only Output 3.3V)
- Efficiency 94%@3.3V
- Remote On/Off Control [On : Open, 0 - 1.0V
Off : +1.2V to +Vin
- Output Voltages 1.0 - 3.3V
- Output Voltage Tolerance ±2.0%
- Line Regulation ±0.3% Max.
- Load Regulation ±0.4% Max.
- Switching Frequency 300kHz
- * Ripple and Noise 30mVp-p (@3.3V)

SNS5A - 12 Packages

- Input Range 12V(10-14V)
- Efficiency 93%@5.0V
- Remote On/Off Control [On : Open, 0 - 1.0V
Off : +1.2V to +Vin
- Output Voltages 1.0 - 5.0V
- Output Voltage Tolerance ±2.0%
- Line Regulation ±0.3% Max.
- Load Regulation ±0.4% Max.
- Switching Frequency 300kHz
- * Ripple and Noise 50mVp-p (@5.0V)

ENVIRONMENTAL

- Operating Temperature Range -40°C ~ 85°C
- Storage Temperature Range -40°C ~ 125°C
- Lead Temperature (Soldering , 10sec) +300°C
- Thermal ShUTDOWN +135°C
- MTBF (MIL-HDBK-217F) 1.5 x 10⁶ 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@5.00A	5.00W	30mVp-p	82%	SNS5A-5-1R0V(H)
3.0 - 5.5V	1.2V@5.00A	6.00W	30mVp-p	83%	SNS5A-5-1R2V(H)
3.0 - 5.5V	1.5V@5.00A	7.50W	30mVp-p	87%	SNS5A-5-1R5V(H)
3.0 - 5.5V	1.8V@5.00A	9.00W	30mVp-p	88%	SNS5A-5-1R8V(H)
3.0 - 5.5V	2.0V@5.00A	10.00W	30mVp-p	89%	SNS5A-5-2R0V(H)
3.0 - 5.5V	2.5V@5.00A	12.50W	30mVp-p	91%	SNS5A-5-2R5V(H)
4.5 - 5.5V	3.3V@5.00A	16.50W	30mVp-p	94%	SNS5A-5-3R3V(H)
10 - 14V	1.0V@5.00A	5.00W	50mVp-p	78%	SNS5A-12-1R0V(H)
10 - 14V	1.2V@5.00A	6.00W	50mVp-p	81%	SNS5A-12-1R2V(H)
10 - 14V	1.5V@5.00A	7.50W	50mVp-p	84%	SNS5A-12-1R5V(H)
10 - 14V	1.8V@5.00A	9.00W	50mVp-p	85%	SNS5A-12-1R8V(H)
10 - 14V	2.0V@5.00A	10.00W	50mVp-p	87%	SNS5A-12-2R0V(H)
10 - 14V	2.5V@5.00A	12.50W	50mVp-p	89%	SNS5A-12-2R5V(H)
10 - 14V	3.3V@5.00A	16.50W	50mVp-p	91%	SNS5A-12-3R3V(H)
10 - 14V	5.0V@5.00A	25.00W	50mVp-p	93%	SNS5A-12-5R0V(H)

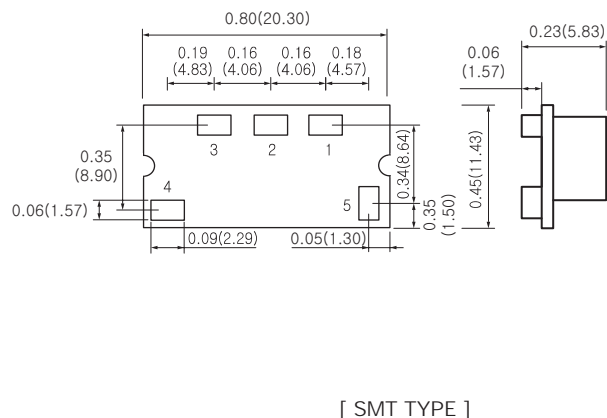
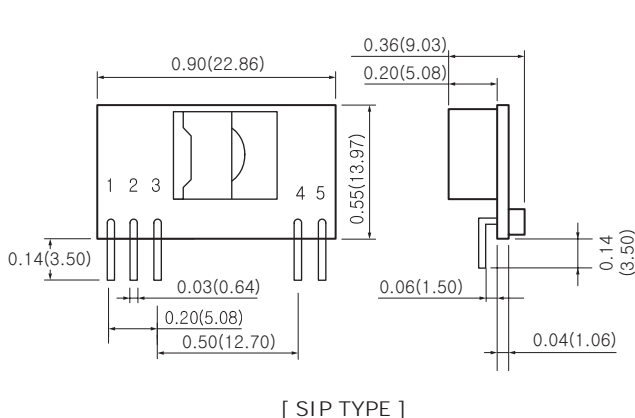
V : SIP package H : SMT package

1. Typical at Ta = +25°C under nominal line voltage and full load conditions, unless otherwise noted. All models are tested and specified with external input and output capacitors. (Cin=100uF X 2 Cout = 10uF), 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 device have no minimum-load requirement and will regulate under no-load conditions. Regulation specification describe the output voltage deviation as the line voltage or load is varied from its minimum value to either extreme.

PIN ASSIGNMENTS

Single Output (SIP)	Single Output (SMT)
1. +Vout	1. +Vout
2. TRM	2. TRM
3. COM	3. COM
4. +Vin	4. +Vin
5. CNT	5. CNT

DIMENSIONS



- NOTE**
- 1 All dimension are in inches (mm)
 - 2 Weight : 3.3g or less (SIP)
2.2g or less (SMT)
 - 3 SIP Type Dimension "H"
0.36(9.03) for 5V Input
0.32(8.23) for 12V Input
 - 4 SMT Type Dimension "H"
0.23(5.83) for 5V Input
0.28(7.13) for 12V Input