

SNS15A Series

NON-ISOLATED DC-DC POL CONVERTER



FEATURES 5V, 12V Inputs

- Delivers 15A 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)
- Remote Sense
- Trimmable Output Voltage via External Resistor
- Low Output Ripple / Noise
- Over Current Protection (OCP)
- Over Temperature Protection (OTP)
- 3 Year Warranty

ELECTRICAL SPECIFICATIONS

SNS15A - 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	40mVp-p (@3.3V)

SNS15A - 12 Packages

· Input Range	12V(10 - 14V)
· Efficiency	94%@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	60mVp-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)	8.0 x 10 ⁵ hrs (5V Input) 7.6 x 10 ⁵ hrs (12V Input)

* 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@15.00A	15.00W	40mVp-p	84%	SNS15A-5-1R0V(H)
3.0 - 5.5V	1.2V@15.00A	18.00W	40mVp-p	86%	SNS15A-5-1R2V(H)
3.0 - 5.5V	1.5V@15.00A	22.50W	40mVp-p	88%	SNS15A-5-1R5V(H)
3.0 - 5.5V	1.8V@15.00A	27.00W	40mVp-p	89%	SNS15A-5-1R8V(H)
3.0 - 5.5V	2.0V@15.00A	30.00W	40mVp-p	91%	SNS15A-5-2R0V(H)
3.0 - 5.5V	2.5V@15.00A	37.50W	40mVp-p	92%	SNS15A-5-2R5V(H)
4.5 - 5.5V	3.3V@15.00A	49.50W	40mVp-p	94%	SNS15A-5-3R3V(H)
10 - 14V	1.0V@15.00A	15.00W	60mVp-p	80%	SNS15A-12-1R0V(H)
10 - 14V	1.2V@15.00A	18.00W	60mVp-p	82%	SNS15A-12-1R2V(H)
10 - 14V	1.5V@15.00A	22.50W	60mVp-p	85%	SNS15A-12-1R5V(H)
10 - 14V	1.8V@15.00A	27.00W	60mVp-p	87%	SNS15A-12-1R8V(H)
10 - 14V	2.0V@15.00A	30.00W	60mVp-p	88%	SNS15A-12-2R0V(H)
10 - 14V	2.5V@15.00A	37.50W	60mVp-p	90%	SNS15A-12-2R5V(H)
10 - 14V	3.3V@15.00A	49.50W	60mVp-p	92%	SNS15A-12-3R3V(H)
10 - 14V	5.0V@15.00A	75.00W	60mVp-p	94%	SNS15A-12-5R0V(H)

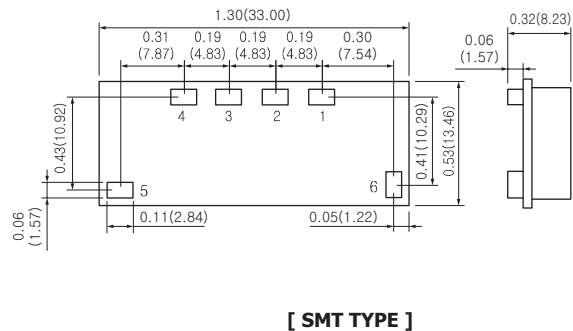
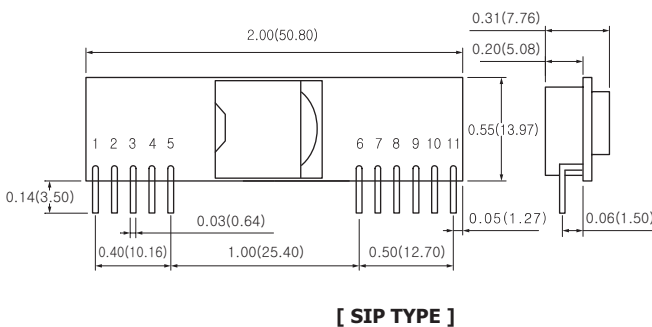
V : SIP package H : SMT package

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. Sense
2. +Vout	2. TRM
3. Sense	3. +Vout
4. +Vout	4. COM
5. COM	5. +Vin
6. COM	6. CNT
7. +Vin	
8. +Vin	
9. No Pin	
10. TRM	
11. CNT	

DIMENSIONS



- NOTE**
- 1 All dimension are in inches (mm)
 - 2 Weight : 6.2g or less (SIP)
5.5g or less (SMT)
 - 3 SIP Type Dimension "H"
0.31(7.76) for 5V Input
0.36(9.09) for 12V Input