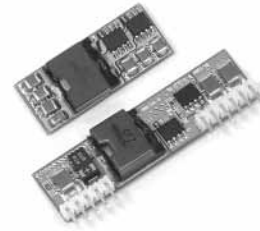


# SNS10A

## Non-isolated DC/DC POL converter

**Total output current** 10 A  
**Input voltages** 5V or 12V Input  
**#of outputs** Single output



## SPECIAL FEATURES

- Delivers 10A of output Current
- High efficiency
- Low Output Ripple & Noise
- Small size and low profile ..... 50.8mm × 13.97mm × 8.64mm (SIP package)
- Cost-efficient open frame design
- Single - in - line (SIP) & SMT package
- Remote ON/OFF (active low)
- Remote sense
- Trimmable output voltage via external resistor
- Output Over current protection
- Over temperature protection
- Wide Operating temperature range ..... -40 °C ~ 85 °C

## ELECTRICAL SPECIFICATIONS

### SNS 10A - 5 SIP Packages

- Efficiency ..... 94% @ 3.3V
- Input voltage range ..... 3.0V - 5.5V
- Output voltage ..... 1.0V - 3.3V
- Voltage tolerance ..... ± 2.0%
- Line regulation ..... ± 0.3%
- Load regulation ..... ± 0.4%
- Switching frequency ..... 300KHz
- \*Ripple & noise ..... 30mVp-p (@3.3V)
- MTBF .....  $8.0 \times 10^5$  hrs

### SNS 10A - 12 SIP Packages

- Efficiency ..... 94% @ 5.0V
- Input voltage range ..... 10.0V - 14.0V
- Output voltage ..... 1.0V - 5.0V
- Voltage tolerance ..... ± 2.0%
- Line regulation ..... ± 0.3%
- Load regulation ..... ± 0.4%
- Switching frequency ..... 300KHz
- \*Ripple & noise ..... 50mVp-p (@5V)
- MTBF .....  $7.6 \times 10^5$  hrs

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

## Ordering Information

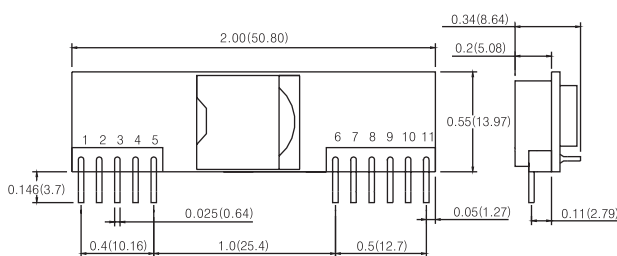
Input	Output	Maximum Power	Ripple&Noise max	Efficiency Typ.	Model Number
3.0-5.5V	1.0V@10A	10.0W	30mVp-p	82%	<b>SNS10A-5-1R0</b>
3.0-5.5V	1.5V@10A	15.0W	30mVp-p	87%	<b>SNS10A-5-1R5</b>
3.0-5.5V	1.8V@10A	18.0W	30mVp-p	88%	<b>SNS10A-5-1R8</b>
3.0-5.5V	2.0V@10A	20.0W	30mVp-p	90%	<b>SNS10A-5-2R0</b>
3.0-5.5V	2.5V@10A	25.0W	30mVp-p	92%	<b>SNS10A-5-2R5</b>
4.5-5.5V	3.3V@10A	33.0W	30mVp-p	94%	<b>SNS10A-5-3R3</b>
10-14V	1.0V@10A	10.0W	50mVp-p	81%	<b>SNS10A-12-1R0</b>
10-14V	1.5V@10A	15.0W	50mVp-p	84%	<b>SNS10A-12-1R5</b>
10-14V	1.8V@10A	18.0W	50mVp-p	85%	<b>SNS10A-12-1R8</b>
10-14V	2.5V@10A	25.0W	50mVp-p	87%	<b>SNS10A-12-2R5</b>
10-14V	3.3V@10A	33.0W	50mVp-p	89%	<b>SNS10A-12-3R3</b>
10-14V	5.0V@10A	50.0W	50mVp-p	92%	<b>SNS10A-12-5R0</b>

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. ( $C_{in} = 100\mu\text{F} \times 2$   $C_{out} = 10\mu\text{F}$ ). 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 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.

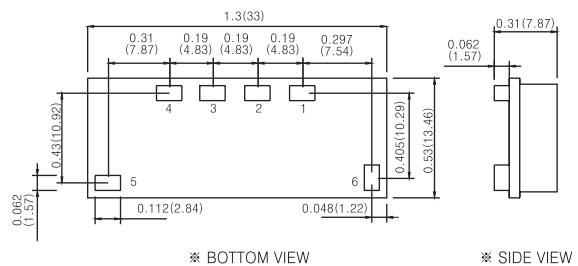
## Pin assignment

Single Output (SIP)	Single Output (SMT)
1. +Vout	1. Sense
2. +Vout	2. Trim
3. Sense	3. +Vout
4. +Vout	4. COM
5. COM	5. +Vin
6. COM	6. ON/OFF
7. +Vin	
8. +Vin	
9. No Pin	
10. TRIM	
11. ON/OFF	

## Dimensions



<SIP TYPE>



\* BOTTOM VIEW

\* SIDE VIEW

<SMT TYPE>

### NOTES

1. All dimensions are in inches (mm)
2. Weight : 7.8g or less (SIP)  
5.6g or less (SMT)