

Specification

INPUT SPECIFICATIONS:

| | |
|----------------------------------|--------------------------|
| Input Voltage Range.....12V..... | 6.0 – 14V |
| | 12V.....6.5 – 14V |
| Under Voltage Lock-out | Power up5.0V Typ. |
| | Power down.....4.0V Typ. |
| Input Filter Type..... | Capacitive |
| Positive Remote on/off Control : | |
| Module ON..... | Open Circuit or = Vin |
| Module OFF..... | < 0.4 Vdc |

OUTPUT SPECIFICATIONS:

| | |
|---|---------------------------|
| Voltage Accuracy..... | ±1.5% max. |
| Transient Response :25% Step Load Change..... | <200µ sec. |
| Ripple and Noise, 20MHz BW3..... | 30mV rms max |
| | 75mV pk-pk max |
| Coefficient..... | ±0.03%/C max |
| Short Circuit Protection..... | Continuous |
| Line Regulation1..... | ± 0.2% max. |
| Load Regulation2..... | ± 0.5% max. |
| External Trim Adj. Range (see Table1)..... | Vo=0.75-5.0Vdc |
| Sequencing Slew Rate Capability (dVSEQ/dt)..... | 0.1-1.0V/msec |
| Sequencing Delay Time..... | 10msec min. |
| Tracking Accuracy..... | Power up.....200mV max. |
| | Power down.....400mV max. |
| Capacitive Load, Low ESR..... | 8000µF max. |
| Power Good Signal Asserted Logic High..... | Vo=90%-100%Vo,nom |

GENERAL SPECIFICATIONS:

| | |
|---|---------------------------------|
| Efficiency..... | See Table |
| Isolation Voltage..... | Non-isolation |
| Switching Frequency | 300KHz Typ. |
| Over Temperature Protection | 130°C Typ. |
| Operating Ambient Temperature Range..... | -40°C to +85°C |
| Power Derating Curve | see Figure 2,3 |
| Storage Temperature Range | -55°C to +125°C |
| Dimensions: | |
| SIP Package: 2.00 x 0.510 x 0.327 inches (50.8 x 12.95 x 8.30 mm) | |
| SMT Package: 1.30 x 0.530 x 0.346 inches (33.0 x 13.46 x 8.80 mm) | |
| Structure..... | Non-potted With Open Frame Type |
| Weight..... | 8.5g |

SIP16W-12S05A Vo=3.3V Derating Curve

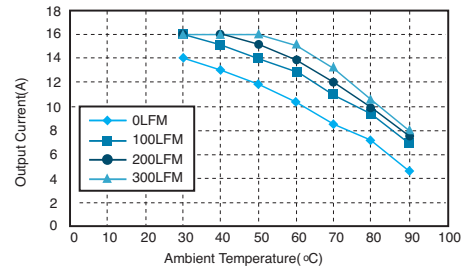


Figure 2. Typical Power De-rating for 12V IN

SMT16W-12S05A Vo=3.3V Derating Curve

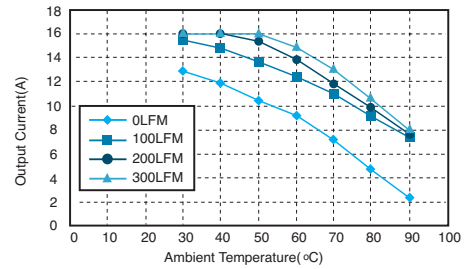


Figure 3. Typical Power De-rating for 12V IN

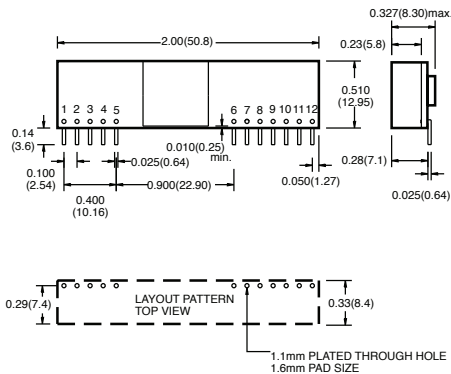
NOTE:

1. Measured From High Line to Low Line, Vo,set=3.3Vdc
2. Measured From Full Load to Zero Load, Vo,set=3.3Vdc
3. The output noise is measured with 10uf tantalum capacitor and 1uf ceramic capacitor across output.
4. The Input Terminal Recommend to Parallel With 100uF Capacitor ESR<100mΩ to Reduce The Input Ripple Voltage
5. Suffix "N" to the Model Number with Negative Logic Remote on/off
 Model ON..... Open Circuit or < 0.4VDC
 Module OFF..... >+2.8VDC to Vin
6. Suffix "P" to the Model Number with Power Good function.

Mechanical Specification

All Dimensions In Inches(mm)
 Tolerance Inches: x.xx= ±0.02, x.xxx= ±0.010
 Millimeters: x.x= ±0.5, x.xx= ±0.25

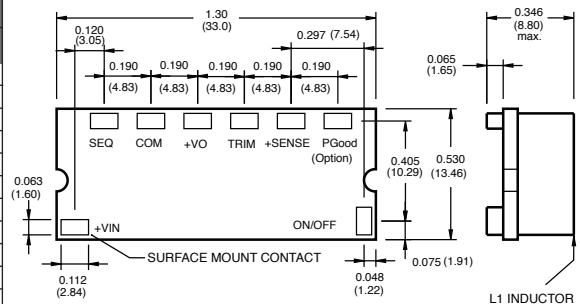
SIP Packages



| PIN CONNECTION | |
|----------------|----------------|
| Pin | Function |
| 1 | +Output |
| 2 | +Output |
| 3 | +Sense |
| 4 | +Output |
| 5 | Common |
| 6 | No Pin / PGood |
| 7 | Common |
| 8 | +V Input |
| 9 | +V Input |
| 10 | Sequency |
| 11 | Trim |
| 12 | On/Off Control |

SMT Packages

BOTTOM VIEW OF BOARD



All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

Data sheets are subject to change without notice