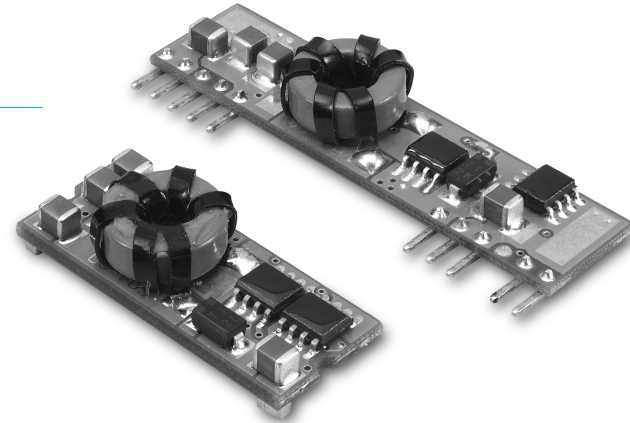


SERIES SIP SMT10-05

10 AMP SIP&SMT PACKAGES DC-DC CONVERTERS

Features

- Industry Standard Pin out
- High Efficiency to 95%
- 300KHz Switching Frequency
- 3.0 –5.5VDC Input Range
- Over Temperature Protection
- Continuous Short Circuit Protection
- Remote ON/OFF
- Cost Efficient Open Frame Design
- UL/C-UL60950 Certified



MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT NO LOAD	INPUT CURRENT FULL LOAD	%EFF
SIP10-05S10 SMT10-05S10	3.0 –5.5 VDC	1.0VDC	10 A	50mA	2353mA	85
SIP10-05S12 SMT10-05S12	3.0 –5.5 VDC	1.2VDC	10 A	50mA	2791mA	86
SIP10-05S15 SMT10-05S15	3.0 –5.5 VDC	1.5VDC	10 A	50mA	3409mA	88
SIP10-05S18 SMT10-05S18	3.0 –5.5 VDC	1.8VDC	10 A	50mA	4000mA	90
SIP10-05S20 SMT10-05S20	3.0 –5.5 VDC	2.0VDC	10 A	60mA	4396mA	91
SIP10-05S25 SMT10-05S25	3.0 –5.5 VDC	2.5VDC	10 A	60mA	5376mA	93
SIP10-05S33 SMT10-05S33	4.5 –5.5 VDC	3.3VDC	10 A	60mA	6947mA	95

NOTE : 1. Nominal Input Voltage 5.0VDC

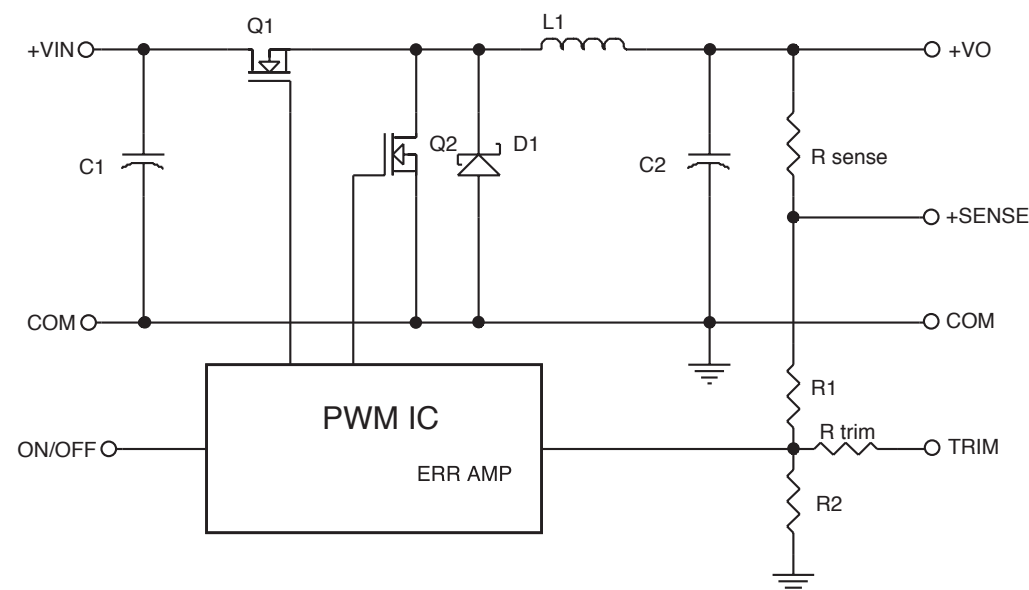


Figure 1. Simplified Schematic

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range.....	5V.....	3.0 – 5.5V
.....	5V.....	4.5 – 5.5V
Under Voltage Lock-out	Power up	2.8V Typ.
.....	Power down.....	2.7V 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 BW Note3.....	20mVrms max.
.....	50mVpk-pk max.
Temperature Coefficient.....	±0.03%/C max.
Short Circuit Protection.....	Continuous
Line Regulation, Note1.....	± 0.2% max.
Load Regulation, Note2.....	± 0.5% max.
Capacitive Load, Low ESR.....	10000µF max.
External Trim Adj. Range.....	± 10%

GENERAL SPECIFICATIONS:

Efficiency.....	See Table
Isolation Voltage.....	Non-isolation
Switching Frequency	300KHz Typ.
Over Temperature Protection	120°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:	2.0 x 0.5 x 0.33 inches (50.8 x 12.7 x 8.3 mm)
SMT Package:	1.3 x 0.53 x 0.366 inches (33.0 x 12.46 x 9.3 mm)
Structure.....	Non-potted With Open Frame Type
Weight.....	6.8g

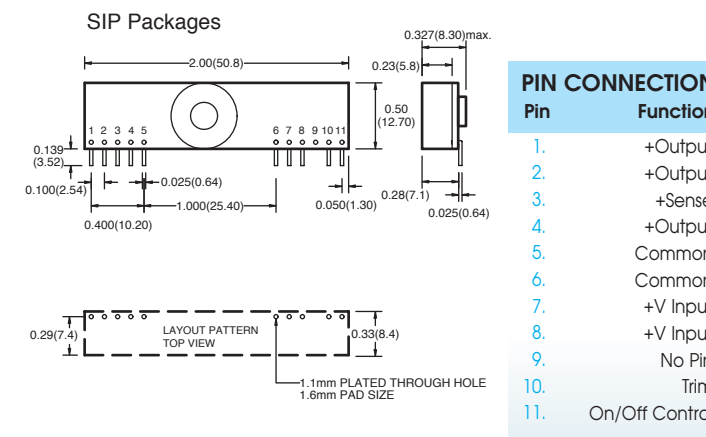
NOTE:

1. Measured From High Line to Low Line
2. Measured From Full Load to Zero Load
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<20mΩ to Reduce The Input Ripple Voltage
5. Suffix "N" to the Model Number with Negative Logic Remote on/off
Module ON..... Open Circuit or < 0.4VDC
Module OFF..... >+2.8VDC to Vin

Mechanical Specification

All Dimensions are in Inches(mm)

Tolerances : .XX±.02 in(.X±.5), unless otherwise noted
.XXX±.010 in (.XX±.25)



PIN	FUNCTION
1.	+Output
2.	+Output
3.	+Sense
4.	+Output
5.	Common
6.	Common
7.	+V Input
8.	+V Input
9.	No Pin
10.	Trim
11.	On/Off Control

SMT Packages BOTTOM VIEW OF BOARD

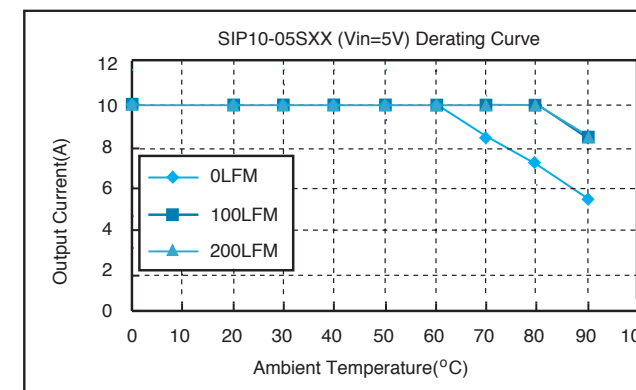
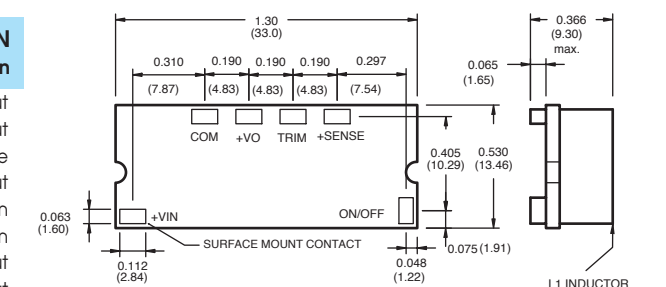


Figure 2. Typical Power De-rating for 5V IN

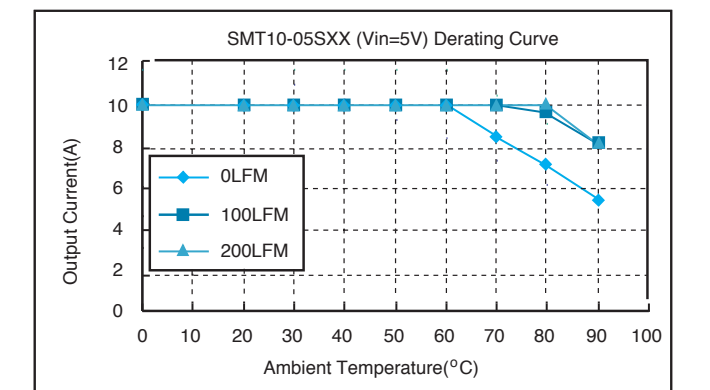


Figure 3. Typical Power De-rating for 5V IN