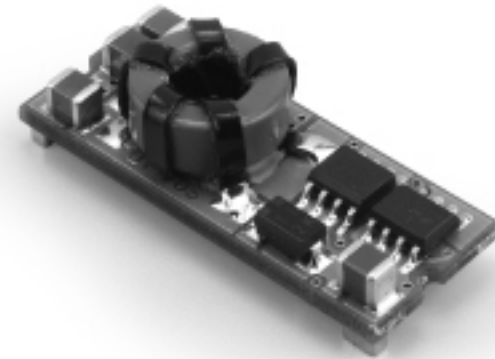


SMT15-05

15A SURFACE MOUNT PACKAGES DC-DC CONVERTERS



Features

- 15Amp Surface Mount Packages
- High Efficiency to 94%
- 300KHz Switching Frequency
- 3.0 – 5.5VDC Input Range
- 0.9 – 3.63VDC Wide Output Range
- Over Temperature Protection
- Continuous Short Circuit Protection
- Remote ON/OFF

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	Efficiency 3.3V@15A	Connector Type	Packaging
SMT15-05S33	3.0 – 5.5 VDC	0.9-3.63 VDC	15 A	94%	SMT	Tape & Reel

NOTE : 1. Nominal Input Voltage 5 VDC

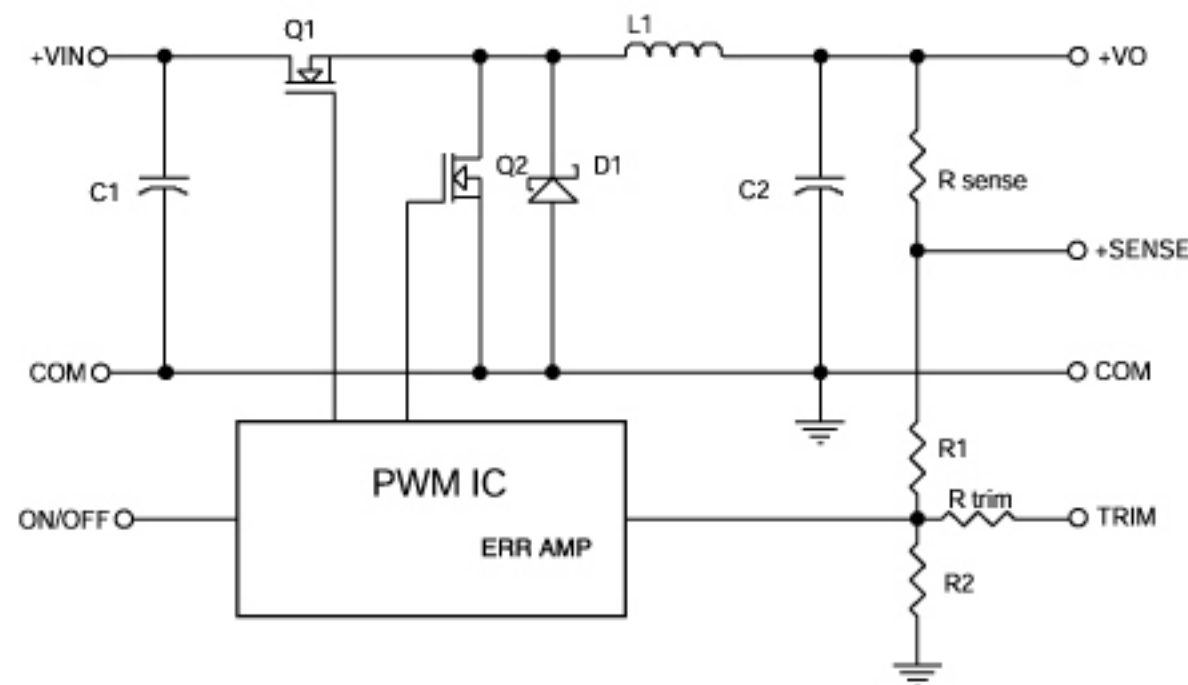


Figure 1. Simplified Schematic

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range.....5V.....3.0 – 5.5V	(Vo = 3.3 Vdc).....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.....20mV rms max.
50mV pk-pk max.
Temperature Coefficient.....±0.03%/C max.
Short Circuit Protection.....Continuous
Line Regulation, Note1.....±0.4% max.
Load Regulation, Note2.....±0.5% max.

External Trim Adj. Range(see Table1)..... Vo=0.9 – 3.63Vdc

GENERAL SPECIFICATIONS:

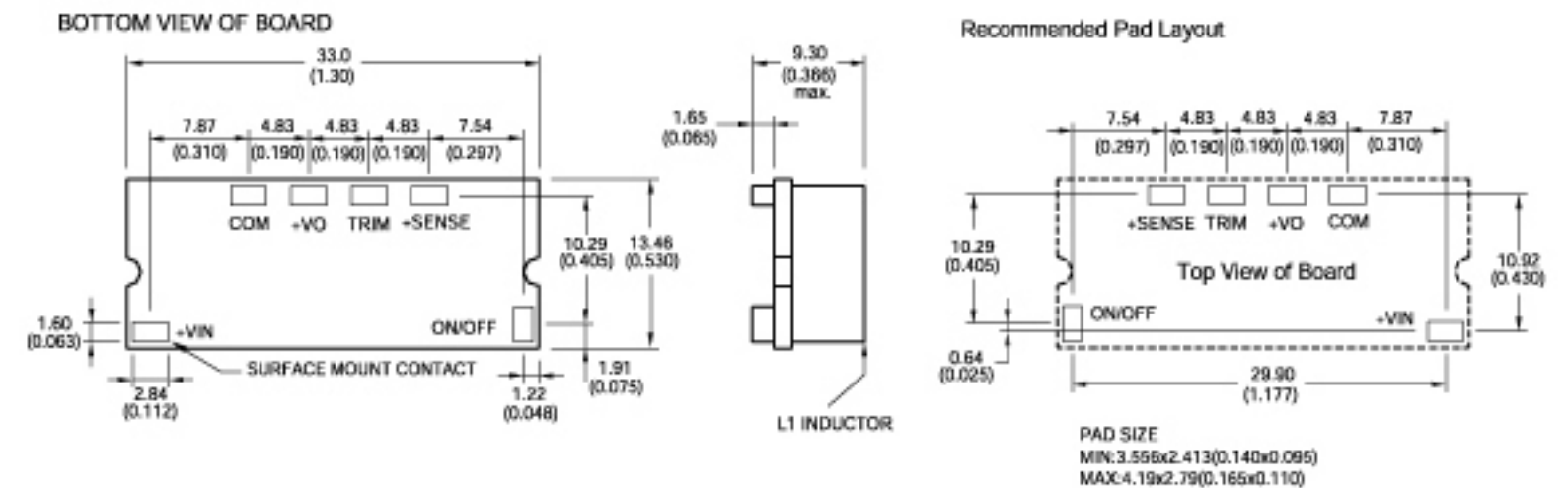
Efficiency.....	See Table
Isolation Voltage.....	Non-isolation
Switching Frequency.....	300KHz Typ.
Over Temperature Protection.....	120°C Typ.
Operating Ambient Temperature Range.....	-40°C to +85°C
Derating Temperature.....	see Figure2
Storage Temperature Range.....	-55°C to +125°C
Dimensions.....	1.30 x 0.53 x 0.366 inches (33.00 x 13.46 x 9.30 mm)
Structure.....	Non-potted With Open Frame Type

- NOTE:**
1. Measured From High Line to Low Line , Vo,set=1.8Vdc
 2. Measured From Full Load to Zero Load , Vo,set=3.3Vdc
 3. The output noise is measured with 10µf tantalum capacitor and 1µf ceramic capacitor across output.
 - 4.The input terminal recommend to parallel with 100µF 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 in Millimeters (Inches)

Tolerances	Inches	.XX±.02	XXX±.010
	Millimeters	.X±.5	.XX±.25



Vo,set (V)	Rtrim (K)
0.90	135.36
1.00	79.17
1.20	41.71
1.50	22.98
1.80	14.96
2.00	11.75
2.50	6.93
3.30	3.15
3.63	2.20

Table 1. External Resistor Values for programming output voltage

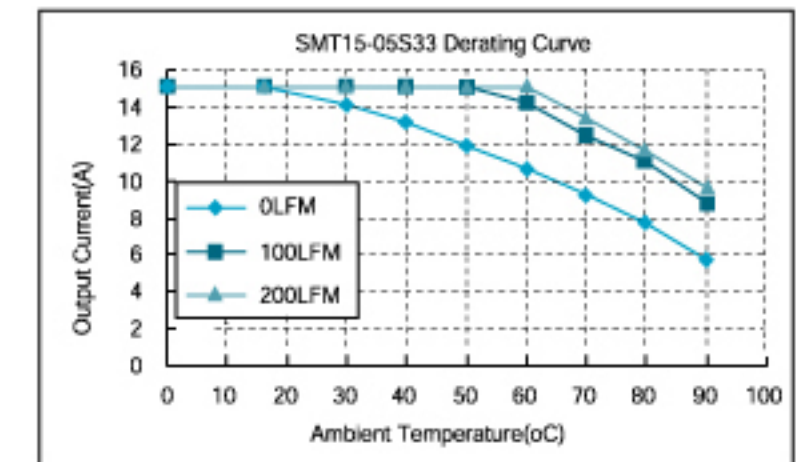


Figure 2. Typical Power Derating vs. Output Current for 5.0V IN