

PL5 Series

5A Non-Isolated
DC-DC Converters

- Industry Standard Package and Pin Out
- DOSA Compatible Models
- Low Voltage Outputs to 0.75V
- Pin and SMT Versions
- Output Voltage Adjustment
- Remote On/Off

Key Market Segments & Applications

Telecommunications
Data Communications
Networking Equipment
Test Equipment
Industrial Electronics
Distributed Power Architecture

PL5 Features and Benefits

Features

- High Efficiency up to 94%
- Wide Output Voltage Adjustment Range
- SMT or Through Hole Packages
- Industry Standard Pin Out

Benefits

- Reduces Input Current Draw
- Stock One Part for all Voltages
- Multiple Mounting Methods
- Second Sourcing

Specifications

ITEMS	MODEL		PL5S-05C	PL5SMS-05C	PL5S-12C	PL5SMS-12C
	(2)	VDC	0.75 - 3.3VDC		0.75 - 5.0VDC	
Output Voltage Range	(2)	VDC	0.75 - 3.3VDC		0.75 - 5.0VDC	
Output Current		A	5 Amps			
Output Voltage Accuracy		%	±1.5%			
Turn on/off Threshold (typ)		VDC	On: 2.0V, Off: 1.9V		On: 8.0V, Off: 7.9V	
Ripple & Noise (Typ)	(1)	mV	20mV rms, 50mV pk-pkVo=5VDC, 45mV rms, 75mV pk-pk			
Line Regulation (Typ)		%	± 0.4% (Vo=3.3V)		± 0.2% (Vo=3.3V)	
Load Regulation (Typ)		%	± 0.5% (Vo=3.3V)			
Capacitive Load (max)		µF	3000µF			
Transient Response		-	<200µs settling time for 25% load change			
Overcurrent Protection		-	Continuous			
Overvoltage Protection		-	N/A			
Over Temp. Protection		°C	120°C typ.			
Remote Sense		-	N/A			
Remote On / Off		-	On: Vin or open circuit; Off: <0.4VDC			
Operating Temperature		°C	-40°C to +85°C			
Operating Humidity		%	20 - 95% Non condensing			
Storage Temperature		°C	-55°C to +125°C			
Storage Humidity		%	10 - 95% Non condensing			
Cooling		-	Convection, or forced air			
Vibration (non operating)		-	10 - 500 -10 Hz, amplitude 1.524mm, X, Y, Z 6 minutes each			
Shock		-	half sine wave, 40g, 11ms, 3 times each axis, +X, -X, +Y, -Y, +Z, -Z			
Safety Agency Approvals		-	UL/C-UL60950			
Switching Frequency		kHz	300kHz			
Weight (Typ)		g	2.1	2.4	2.1	2.4
Size (W x L x H)		-	See outline drawing			
Warranty		yrs	2			

Note: See Installation Manual for full details, test methods of parameters and application notes

(1) The output noise is measured with a 10µF tantalum cap and 1µF ceramic cap across output (2) See application notes for Trim equations and tables

Model Selector						
Model	Input Voltage (VDC)	Output Voltage (VDC)	Output Curr. (A)	Input Current* No Load (mA)	Input Current* Full Load (mA)	Eff. (%)
	3.0 - 5.5	0.75	5	25	949	79
	3.0 - 5.5	1.2	5	30	1412	85
	3.0 - 5.5	1.5	5	30	1724	87
PL5S-05C and PL5SMS-05C	3.0 - 5.5	1.8	5	35	2022	89
	3.0 - 5.5	2	5	35	2222	90
	3.0 - 5.5	2.5	5	35	2217	92
	4.5 - 5.5	3.3	5	35	3511	94
	8.3 - 14	0.75	5	20	428	73
	8.3 - 14	1.2	5	25	625	80
	8.3 - 14	1.5	5	25	762	82
PL5S-12C and PL5SMS-12C	8.3 - 14	1.8	5	30	893	84
	8.3 - 14	2	5	30	980	85
	8.3 - 14	2.5	5	35	1197	87
	8.3 - 14	3.3	5	45	1545	89
	8.3 - 14	5.0	5	50	2264	92

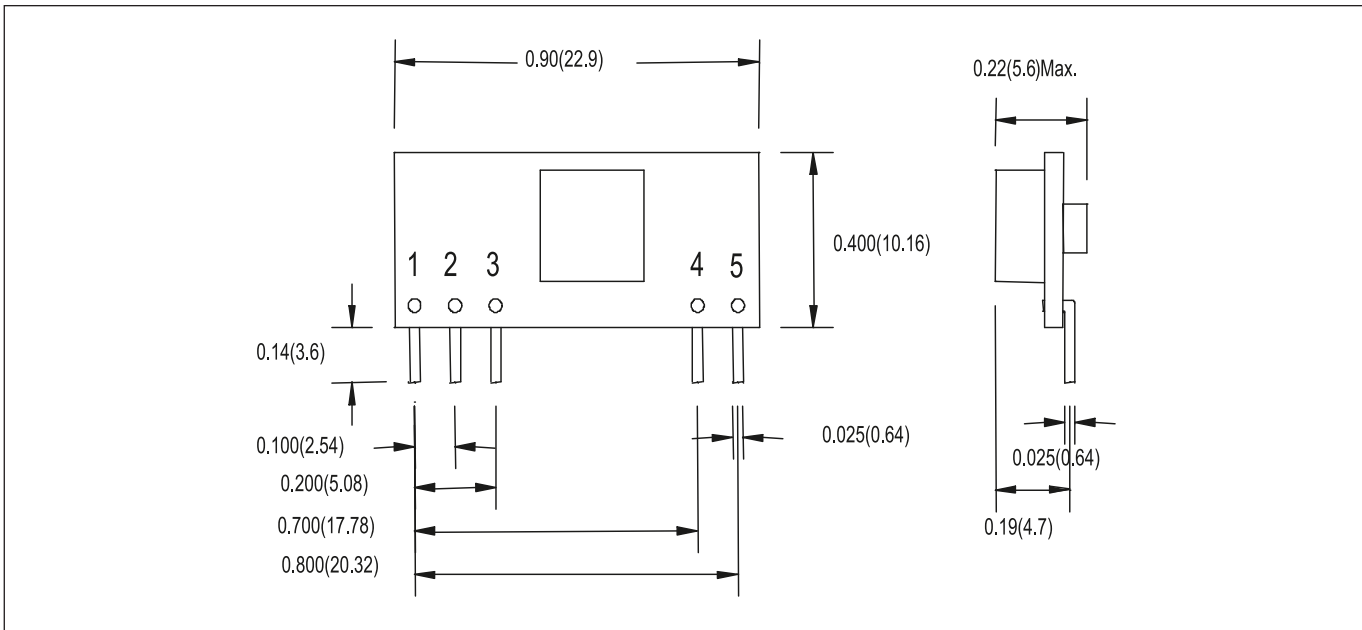
PL5S - SIL 5 pins
 PL5SMS - Surface Mount

* At nominal input voltage (5V or 12V depending on model)

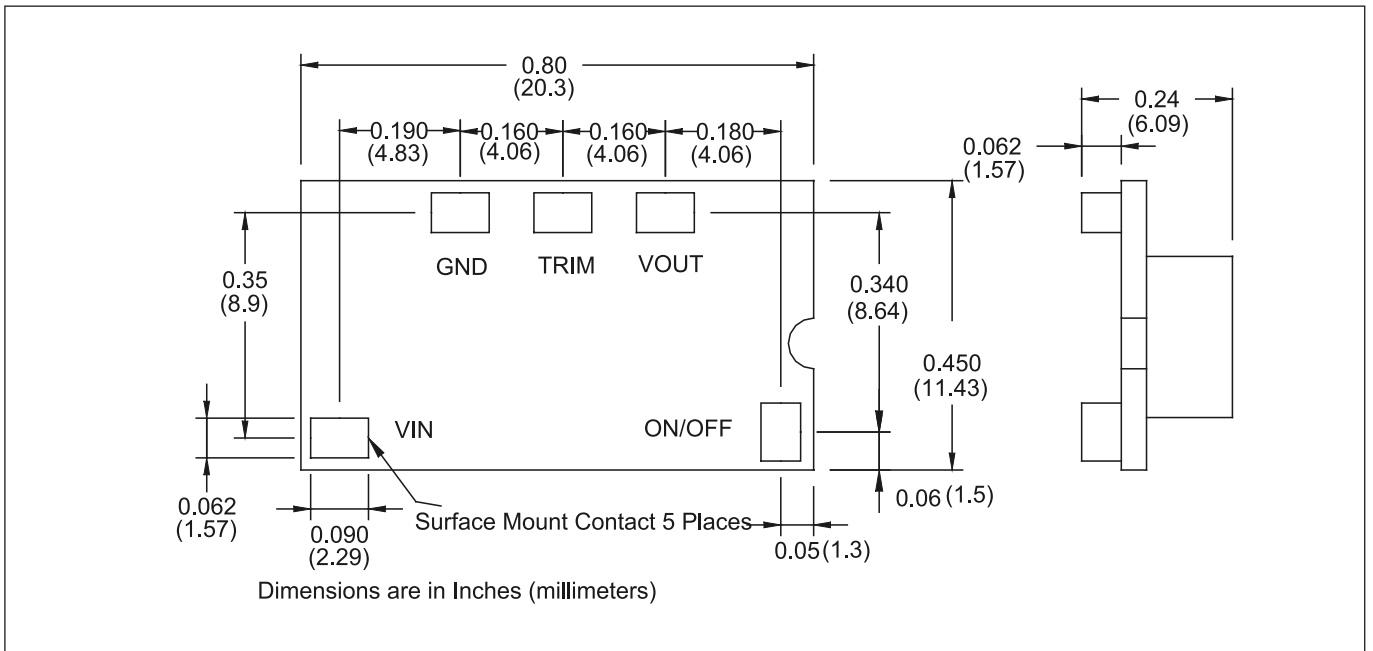
Remote On /Off Option	
Suffix	Function
Blank	On: Vin or open circuit; Off<0.4VDC
N	On: open circuit or <0.4VDC; Off: >2.8VDC to Vin

Pinout			
PIN	Function	PIN	Function
1	+ Output	2	Trim
3	Common	4	+V Input
5	On/Off		

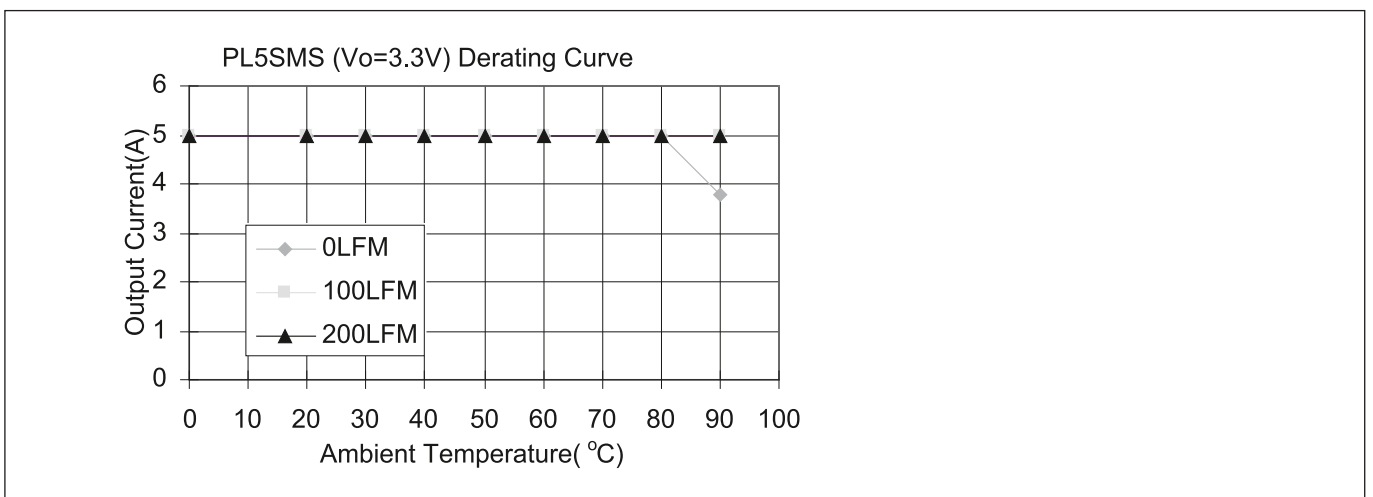
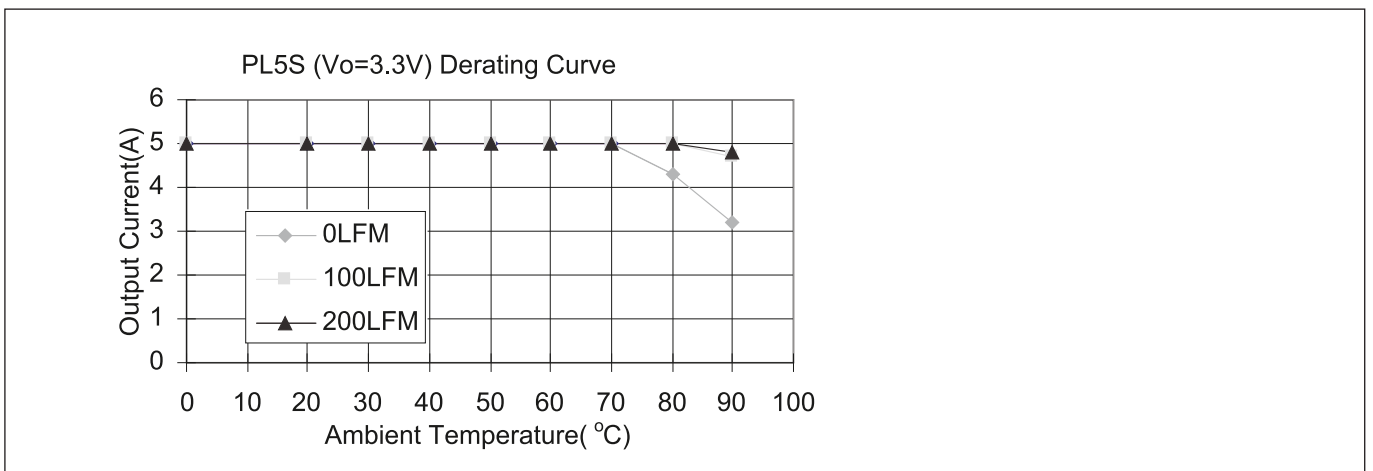
Outline Drawing PL5S Series



Outline Drawing PL5SMS Series



Derating Curve



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