

PL10-20SMS Series

10-20A Surface Mount
Non-Isolated DC-DC Converters

- Industry Standard Package and Footprint
- DOSA Compatible Models
- Low Voltage Outputs to 0.75V
- Wide Input Range 6 to 14V (on 'W' models)
- Output Voltage Adjustment
- Remote On/Off and Sequencing ('W' models)

Key Market Segments & Applications

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

PL10-20SMS Features and Benefits

Features

- High Efficiency up to 95%
- Wide Output Voltage Adjustment Range
- SMT Packages
- Industry Standard Pin Out

Benefits

- Reduces Input Current Draw
- Stock One Part for all Voltages
- Low Assembly Cost
- Second Sourcing

Specifications

ITEMS	MODELS		PL10SMS-12C	PL10SMS-W12C	PL15SMS05C	PL16SMS-12C	PL16SMS-W12C	PL20SMS-W12C
	(2)	VDC	0.75-5.0		0.75-3.3	0.75-5.0		
Output Voltage Range	(2)	VDC	0.75-5.0		0.75-3.3	0.75-5.0		
Output Current		A	10		15	16		20
Output Voltage Accuracy		%	±1.5%					
Turn On/Off Threshold	ON	VDC	8.0V	5.0V	2.8V	8.0V	5.0V	5.0V
	OFF	VDC	7.7V	4.0V	2.7V	7.7V	4.0V	4.0V
Ripple & Noise (Typ)	(1)	m	V		30mV rms, 75mV pk-pk			
Line Regulation (Typ)		%	±0.2% (Vo=3.3V)					
Load Regulation (Typ)		%	±0.5% (Vo=3.3V)					
Capacitive Load (max)		μF	8000μF		10000μF		8000μF	
Transient Response		-	<200μs settling time for 25% load change					
Overcurrent Protection		-	Continuous					
Overvoltage Protection		-	N/A					
Over Temp. Protection		°C	+120°C typ.	+130°C typ.	+120°C typ.	+130°C typ.		
Remote Sense		-	Yes					
Remote On / Off		-	On: Vin or open circuit; Off: <0.4VDC					
Sequencing/Tracking		-	-	Yes	-	-	Yes	Yes
Power Good Signal (logic high)		-	-	Optional	-	-	Optional	
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 - 10Hz, 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 axis					
Safety Agency Approvals		-	UL/C-UL60950					
Switching Frequency		kHz	300kHz					
Weight (Typ)		g	6.5	7.7	6.5	6.8	7.7	10.7
Size (WxHxD)		-	See outline drawing					
Warranty		yrs	2					

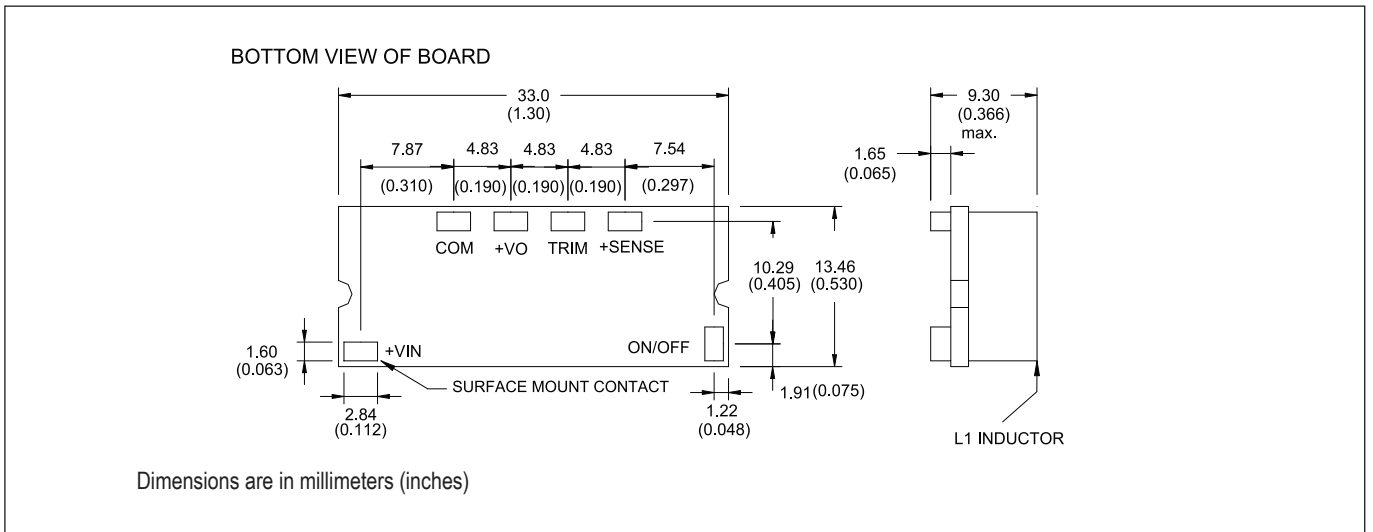
Note: See Installation Manual for full details, test methods of parameters and application notes

(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.

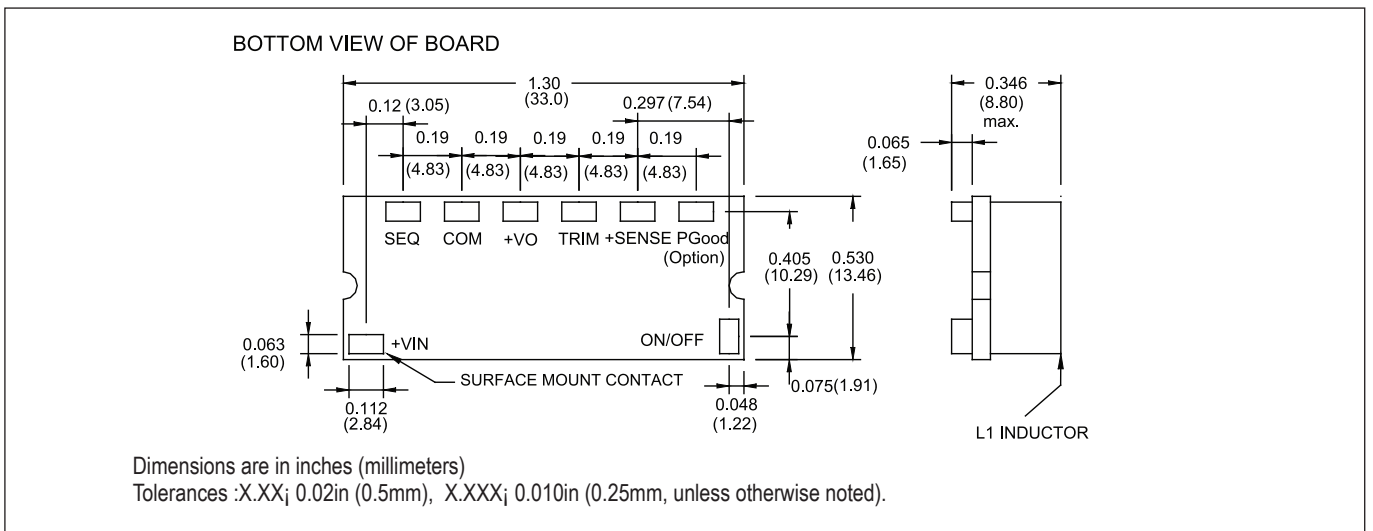
Model Selector						
Model	Input Voltage (VDC)	Output Voltage (VDC)	Output Curr. (A)	No Load (mA)	Full Load (mA)	Eff. (%)
PL10SMS-12C	8.3 - 14	0.75	10	50	762	82
	8.3 - 14	1.2	10	50	1163	86
	8.3 - 14	1.5	10	50	1404	89
	8.3 - 14	1.8	10	60	1666	90
	8.3 - 14	2.0	10	60	1832	91
	8.3 - 14	2.5	10	60	2264	92
	8.3 - 14	3.3	10	70	2956	93
	8.3 - 14	5.0	10	70	4385	94
PL10SMS-W12C	6.0 - 14	0.75	10	40	762	82
	6.0 - 14	1.2	10	40	1149	87
	6.0 - 14	1.5	10	50	1404	89
	6.0 - 14	1.8	10	40	1666	90
	6.0 - 14	2.0	10	60	1832	91
	6.0 - 14	2.5	10	65	2264	92
	6.0 - 14	3.3	10	75	2956	93
	6.5 - 14	5.0	10	95	4386	95
PL15SMS-05C	3.0 - 5.5	0.75	15	60	3658	82
	3.0 - 5.5	1.2	15	60	4286	84
	3.0 - 5.5	1.5	15	60	5172	87
	3.0 - 5.5	1.8	15	70	6136	88
	3.0 - 5.5	2.0	15	70	6742	89
	3.0 - 5.5	2.5	15	70	8152	92
	4.5 - 5.5	3.3	15	70	10532	94
	9.0 - 14	0.75	16	40	1299	77
PL16SMS-12C	9.0 - 14	1.2	16	50	1928	83
	9.0 - 14	1.5	16	50	2326	86
	9.0 - 14	1.8	16	60	2727	88
	9.0 - 14	2.0	16	60	2996	89
	9.0 - 14	2.5	16	65	3704	90
	9.0 - 14	3.3	16	75	4783	92
	9.0 - 14	5.0	16	75	7092	94
	9.0 - 14	0.75	16	40	1250	80
PL16SMS-W12C	6.0 - 14	1.2	16	40	1882	85
	6.0 - 14	1.5	16	50	2273	88
	6.0 - 14	1.8	16	60	2697	89
	6.0 - 14	2.0	16	60	2963	90
	6.0 - 14	2.5	16	65	3663	91
	6.0 - 14	3.3	16	75	4731	93
	6.5 - 14	5.0	16	95	7092	94
	6.0 - 14	0.75	20	40	1603	78
PL20SMS-W12C	6.0 - 14	1.2	20	50	2381	84
	6.0 - 14	1.5	20	50	2874	87
	6.0 - 14	1.8	20	50	3409	88
	6.0 - 14	2.0	20	60	3745	89
	6.0 - 14	2.5	20	65	4630	90
	6.0 - 14	3.3	20	75	5978	92
	6.5 - 14	5.0	20	95	8865	94

Options	
Remote On / Off Option	
Blank	On: Vin or open circuit; Off: <0.4VDC
N	On: open circuit or <0.4VDC; Off: >2.8VDC to Vin
Power Good Option	
P	(available on W12C models)

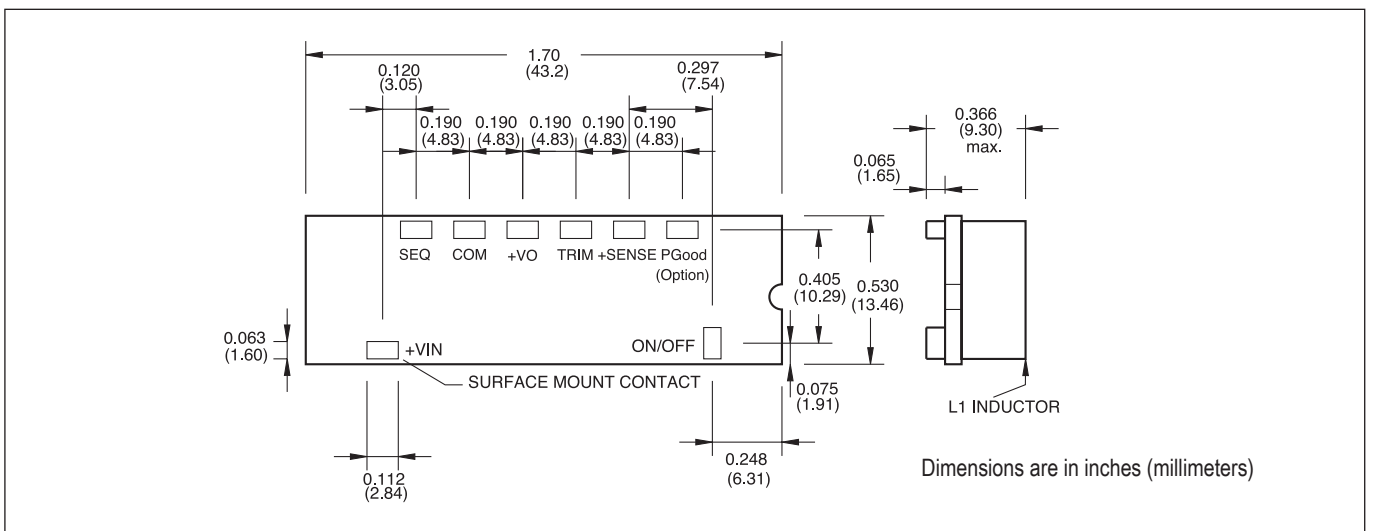
Outline Drawing PL10SMS-12C, PL15SMS-05C & PL16SMS-12C Series



Outline Drawing PL10SMS-W12C & PL16SMS-W12C Series



Outline Drawing PL20SMS-W12C Series



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