

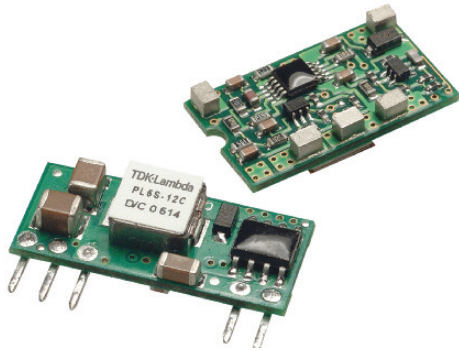
Технические характеристики на преобразователи напряжения DC/DC серии PL

По вопросам продаж и поддержки обращайтесь:

Архангельск (8182)63-90-72
Брянск (4832)59-03-52
Вологда (8172)26-41-59
Иваново (4932)77-34-06
Калининград (4012)72-03-81
Киров (8332)68-02-04
Курск (4712)77-13-04
Москва (495)268-04-70
Нижний Новгород (831)429-08-12
Орел (4862)44-53-42
Пермь (342)205-81-47
Самара (846)206-03-16
Смоленск (4812)29-41-54
Тверь (4822)63-31-35
Тюмень (3452)66-21-18
Челябинск (351)202-03-61

Астана +7(7172)727-132
Владивосток (423)249-28-31
Воронеж (473)204-51-73
Ижевск (3412)26-03-58
Калуга (4842)92-23-67
Краснодар (861)203-40-90
Липецк (4742)52-20-81
Мурманск (8152)59-64-93
Новокузнецк (3843)20-46-81
Оренбург (3532)37-68-04
Ростов-на-Дону (863)308-18-15
Санкт-Петербург (812)309-46-40
Сочи (862)225-72-31
Томск (3822)98-41-53
Ульяновск (8422)24-23-59
Череповец (8202)49-02-64

Белгород (4722)40-23-64
Волгоград (844)278-03-48
Екатеринбург (343)384-55-89
Казань (843)206-01-48
Кемерово (3842)65-04-62
Красноярск (391)204-63-61
Магнитогорск (3519)55-03-13
Набережные Челны (8552)20-53-41
Новосибирск (383)227-86-73
Пенза (8412)22-31-16
Рязань (4912)46-61-64
Саратов (845)249-38-78
Ставрополь (8652)20-65-13
Тула (4872)74-02-29
Уфа (347)229-48-12
Ярославль (4852)69-52-93



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

MODEL			PL5S-05C	PL5SMS-05C	PL5S-12C	PL5SMS-12C
ITEMS						
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. (%)
PL5S-05C and PL5SMS-05C	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
	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
PL5S-12C and PL5SMS-12C	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
	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

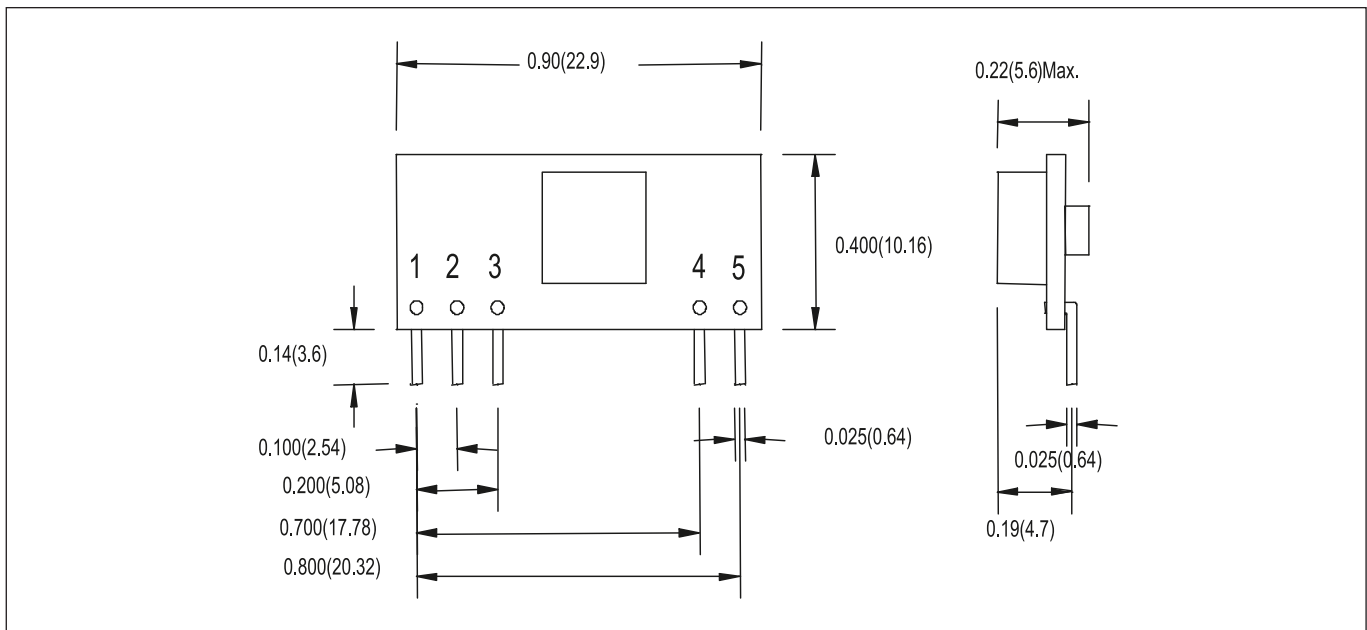
PL5SMS - Surface Mount

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

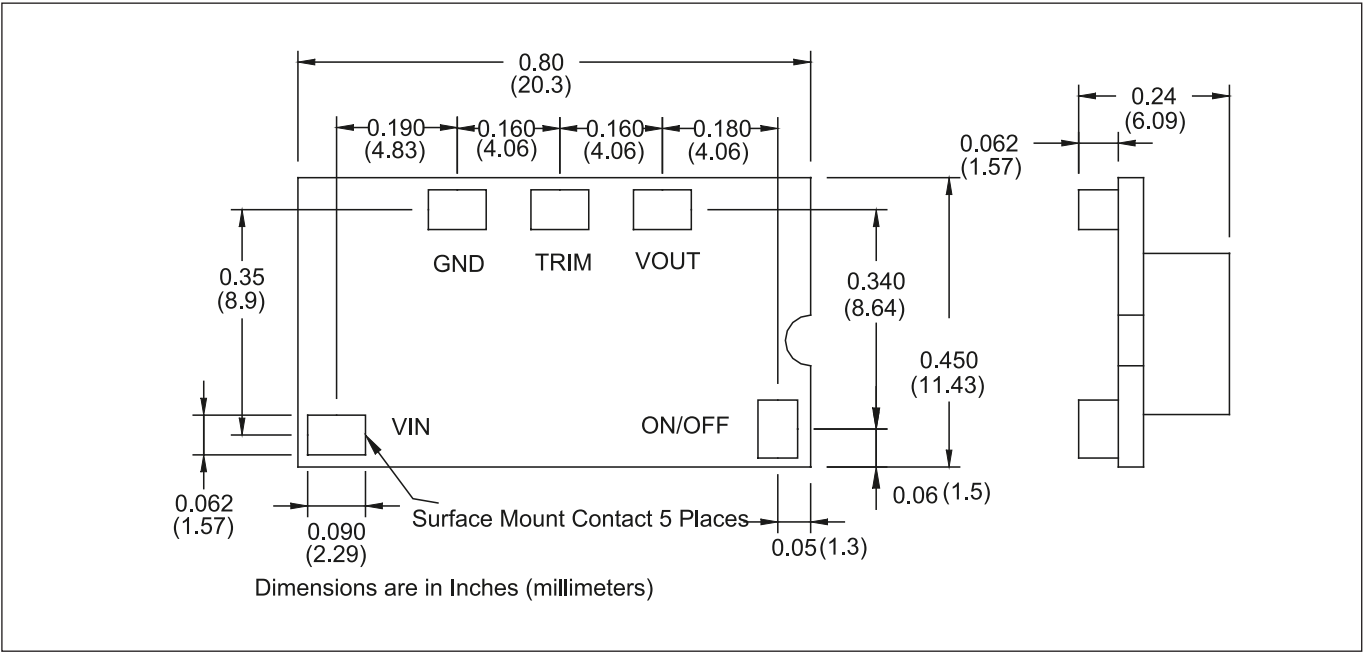
Remote On /Off Option	
Suffix	Function
Blank	On: Vin or open circuit; Off<0.4VDC
N	On: open circuit or <0.4VDC; Off: >2.8VDC to Vin

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

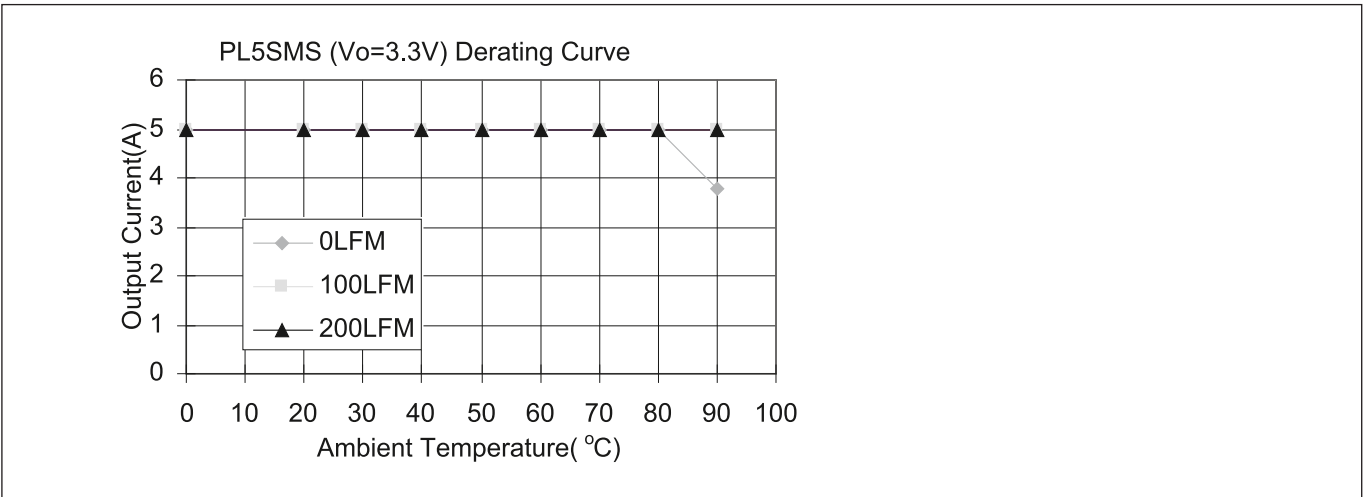
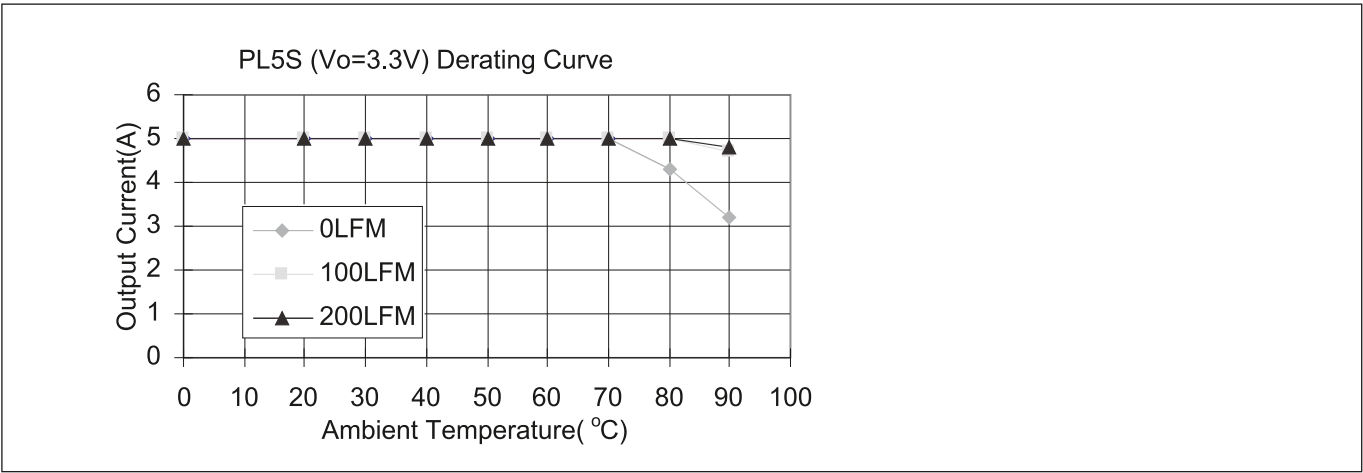
Outline Drawing PL5S Series

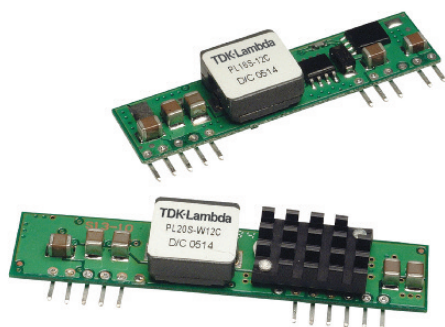


Outline Drawing PL5SMS Series



Derating Curve





PL10-20S Series

10-20A Non-Isolated
DC-DC Converters

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

Key Market Segments & Applications

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

PL10-20S Features and Benefits

Features

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

Benefits

- Reduces Input Current Draw
- Stock One Part for all Voltages
- Less PCB Space Used
- Second Sourcing

Specifications

MODEL			PL10S-W12C	PL10S-12	PL16S-12C	PL16S-W12C	PL20S-W12C
ITEMS							
Output Voltage Range	(2)	VDC	0.75 - 5.0VDC				
Output Current		A	10		16		20
Output Voltage Accuracy		%	±1.5% max.				
Turn on/off Threshold (typ)		VDC	On: 5.0V, Off: 4.0V	On: 8.0V, Off: 7.7V		On: 5.0V, Off: 4.0V	
Ripple & Noise (Typ)	(2)	mV	20mV rms, 75mV pk-pk		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				
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.		
Remote Sense		-	Yes				
Remote On / Off		-	On: Vin or open circuit; Off: <0.4VDC				
Power Good Signal (logic high)		%	Optional	N/A		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				
Safety Agency Approvals		-	UL/C-UL60950				
Sequencing/Tracking		-	Yes	-		Yes	
Switching Frequency		kHz	300kHz				
Weight (Typ)		g	8.0	10.0	8.0	8.5	10.1
Size (WxHxD)		-	See outline drawing				
Warranty		yrs	2				

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

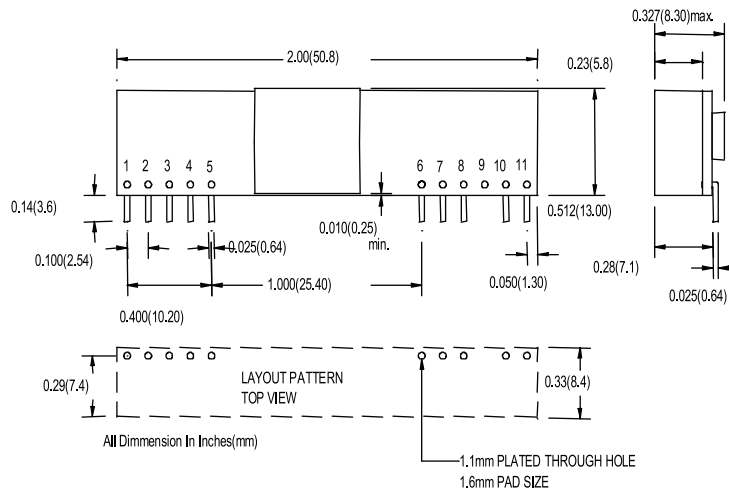
(1) The output noise is measured with a 10μF tantalum cap and 1μF ceramic cap across output (2) See application notes for Trim equations and tables

Model Selector						
Model	Input Voltage (VDC)	Output Voltage (VDC)	Output Curr. (A)	No Load (mA)	Full Load (mA)	Eff. (%)
PL10S-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
PL10S-12-1V0	9.0 - 14	1.0	10	50	992	84
PL10S-12-1V2	9.0 - 14	1.2	10	50	1163	86
PL10S-12-1V5	9.0 - 14	1.5	10	50	1404	89
PL10S-12-1V8	9.0 - 14	1.8	10	60	1666	90
PL10S-12-2V0	9.0 - 14	2.0	10	60	1832	91
PL10S-12-2V5	9.0 - 14	2.5	10	70	2264	92
PL10S-12-3V3	9.0 - 14	3.3	10	70	2956	93
PL10S-12-5V0	9.0 - 14	5.0	10	70	4385	95
PL10S-12-C	8.3 - 14	0.75-5.0	10	70	4385	95
PL16S-12C	9.0 - 14	0.75	16	40	1299	77
	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
PL16S-W12C	6.0 - 14	0.75	16	40	1250	80
	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
PL20S-W12C	6.0 - 14	0.75	20	40	1603	78
	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

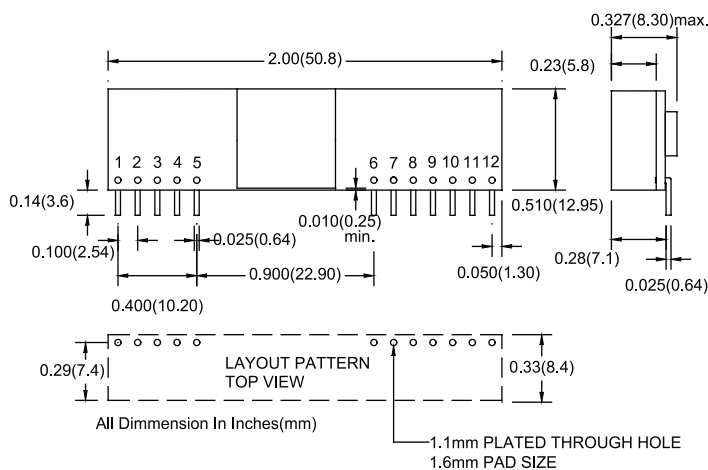
Pinout			
PL10S-W, 16S-W, 20S-W		PL16S-12C	
PIN	Function	PIN	Function
1	+Output	1	+Output
2	+Output	2	+Output
3	+Sense	3	+Sense
4	+Output	4	+Output
5	Common	5	Common
6	No Pin/PGood option	6	Common
7	Common	7	+V Input
8	+V Input	8	+V Input
9	+V Input	9	No Pin
10	Sequencing	10	Trim
11	Trim	11	On/Off Control
12	On/Off Control		

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)

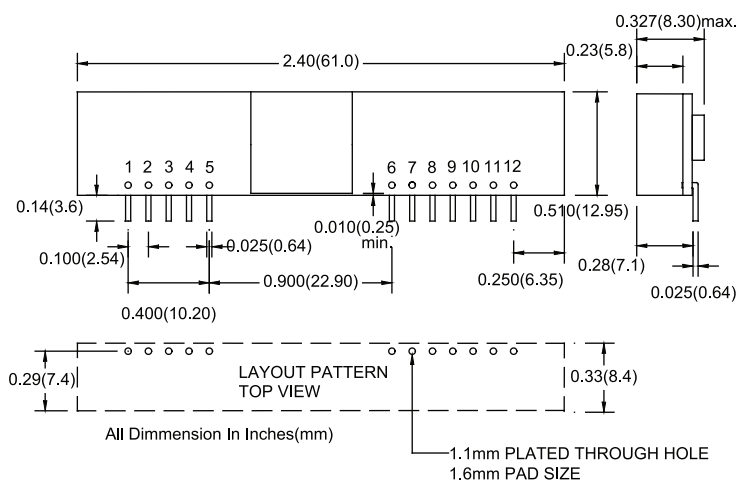
Outline Drawing PL16S-12C Series

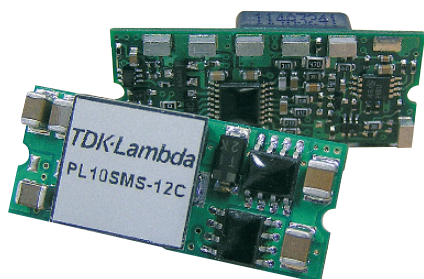


Outline Drawing PL10S-W12C & PL16S-W12C Series



Outline Drawing PL20S-W12C Series





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

MODELS			PL10SMS-12C	PL10SMS-W12C	PL15SMS05C	PL16SMS-12C	PL16SMS-W12C	PL20SMS-W12C
ITEMS								
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

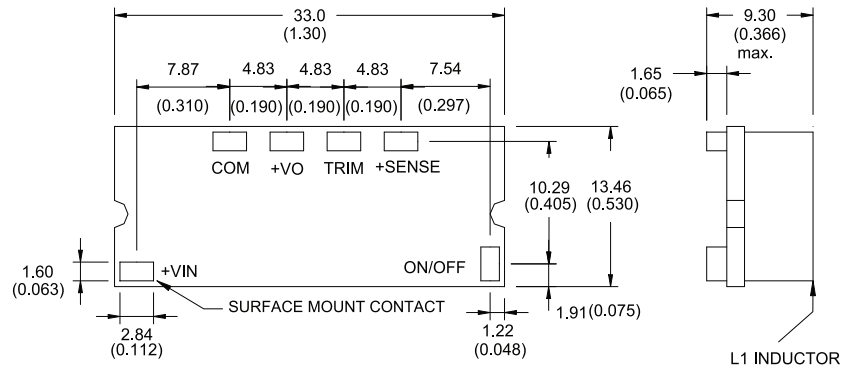
(1) The output noise is measured with a 10μF tantalum cap and 1μF ceramic cap across output. (2) See Application Notes for Trim equations and tables.

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
	6.0 - 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)

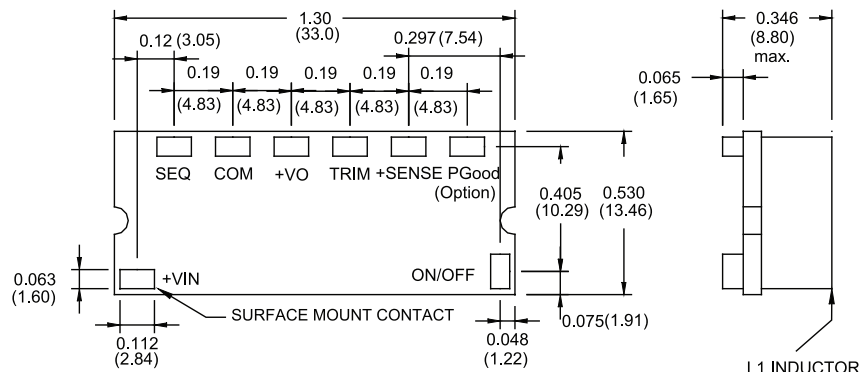
Outline Drawing PL10SMS-12C, PL15SMS-05C & PL16SMS-12C Series

BOTTOM VIEW OF BOARD

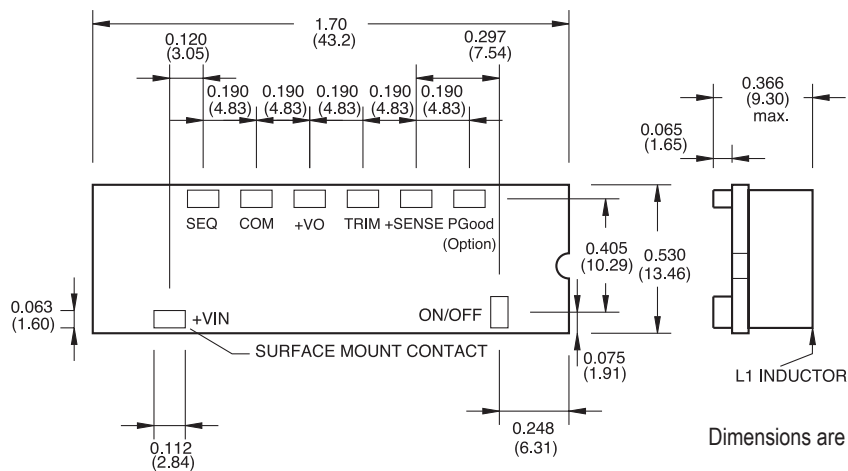


Outline Drawing PL10SMS-W12C & PL16SMS-W12C Series

BOTTOM VIEW OF BOARD



Outline Drawing PL20SMS-W12C Series



По вопросам продаж и поддержки обращайтесь:

Архангельск (8182)63-90-72
Брянск (4832)59-03-52
Вологда (8172)26-41-59
Иваново (4932)77-34-06
Калининград (4012)72-03-81
Киров (8332)68-02-04
Курск (4712)77-13-04
Москва (495)268-04-70
Нижний Новгород (831)429-08-12
Орел (4862)44-53-42
Пермь (342)205-81-47
Самара (846)206-03-16
Смоленск (4812)29-41-54
Тверь (4822)63-31-35
Тюмень (3452)66-21-18
Челябинск (351)202-03-61

Астана +7(7172)727-132
Владивосток (423)249-28-31
Воронеж (473)204-51-73
Ижевск (3412)26-03-58
Калуга (4842)92-23-67
Краснодар (861)203-40-90
Липецк (4742)52-20-81
Мурманск (8152)59-64-93
Новокузнецк (3843)20-46-81
Оренбург (3532)37-68-04
Ростов-на-Дону (863)308-18-15
Санкт-Петербург (812)309-46-40
Сочи (862)225-72-31
Томск (3822)98-41-53
Ульяновск (8422)24-23-59
Череповец (8202)49-02-64

Белгород (4722)40-23-64
Волгоград (844)278-03-48
Екатеринбург (343)384-55-89
Казань (843)206-01-48
Кемерово (3842)65-04-62
Красноярск (391)204-63-61
Магнитогорск (3519)55-03-13
Набережные Челны (8552)20-53-41
Новосибирск (383)227-86-73
Пенза (8412)22-31-16
Рязань (4912)46-61-64
Саратов (845)249-38-78
Ставрополь (8652)20-65-13
Тула (4872)74-02-29
Уфа (347)229-48-12
Ярославль (4852)69-52-93

Эл. почта: adm@nt-rt.ru || Сайт: <http://lambda.nt-rt.ru/>