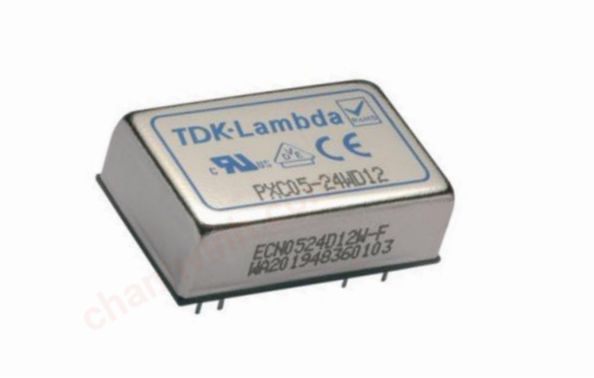
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TDK·Lambda

Innovating Reliable Power



- Industry Standard 24 Pin Dip Package
- Five Sided Shielding
- Wide Range 4:1 Input
- 3.3, 5, 12, 15 Volt Outputs
- Pin & Surface Mount Models

Key Market Segments & Applications

Telecom
Datacom
Factory Automation & Process Control

PXC05 Series

Single and Dual Output 5W
DC-DC Converters

PXC05 Features and Benefits

Features	Benefits
• UL, C-UL, TUV, CE approvals	• Easier system approvals
• Wide range input	• Less parts to inventory
• Five sided shielding	• Reduced radiated noise

Specifications

ITEMS	**PXC05**
Max Output Power	5W
Voltage Accuracy	+/-2%
Voltage Adjustment	None
Minimum Load (1)	10%
Line Regulation	+/-0.2%
Load Regulation (25% to100%)	Single Output: +/-0.5%,Dual Output: +/-1%
Cross Regulation (25% to100%)	Dual +/-5%
Ripple and Noise	50mVp-p (20MHz bandwidth)
Start up time	600ms
Temperature Coefficient	<+/-0.02%/˚C
Operating Temperature	See derating curves
Maximum Case Temperature	+100˚C
Storage Temperature	-55˚C to +105˚C
Thermal Shock	MIL-STD-810D
Relative Humidity (non condensing)	5 to 95%
Transient Response	200μs recovery (25% step load change)
Overvoltage Protection	None
Overcurrent Protection	Typically at 170%, self recovery
Input Surge Voltage (Max for100ms)	12V input: 36V, 24V input: 50V, 48V input: 100V
Reflected input ripple (peak to peak) (2)	20mA
Isolation Voltage	1600VDC min.
Isolation Resistance	10^9 Ω min.
Isolation Capacitance (max)	300pF
Typical Switching Frequency (Fixed)	300kHz
MTBF (BELLCORE TR-NWT-000332)	3,165,000 hours
Vibration	10 - 55Hz, 2G, 30 minutes each X, Y, Z axis
Conducted and Radiated Emissions	EN55022 Level A
Immunity	EN61000-4-2, -3, -4, -5, -6 Pref Criteria 2
Safety Agency Approval	IEC/UL/CSA/EN 62368-1, 60950-1, CE Mark
Size mm (L x W x H)	32 x 21 x 11
Weight (g)	DIP 16 SMD 18
Warranty (yrs)	3

Notes: (1) To meet regulation & noise specifications. Operation at zero load will not damage the device
(2) 12μH source impedance in series with + input (3) SMD package: Add suffix "/SMD" to model number.

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Model Selector

Model	Output Voltage (V)	Output Current (mA)	Output Power (W)	Input Voltage (V)	Nominal Input Current (mA)	Efficiency (%)	Max Load Capacity (uF)
Single Outputs							
PXC05-24WS3P3	3.3	1000	3.3	9 - 36VDC	191	76	2200
PXC05-48WS3P3	3.3	1000	3.3	18 - 75VDC	100	73	2200
PXC05-24WS05	5	1000	5	9 - 36VDC	285	77	1000
PXC05-48WS05	5	1000	5	18 - 75VDC	145	76	1000
PXC05-24WS12	12	470	5.64	9 - 36VDC	309	80	220
PXC05-48WS12	12	470	5.64	18 - 75VDC	155	80	220
PXC05-24WS15	15	400	6	9 - 36VDC	329	80	150
PXC05-48WS15	15	400	6	18 - 75VDC	167	79	150
Dual Outputs							
PXC05-24WD05	+/-5	+/-500	5	9 - 36VDC	282	78	+/-680
PXC05-48WD05	+/-5	+/-500	5	18 - 75VDC	145	76	+/-680
PXC05-24WD12	+/-12	+/-230	5.52	9 - 36VDC	295	82	+/-100
PXC05-48WD12	+/-12	+/-230	5.52	18 - 75VDC	151	80	+/-100
PXC05-24WD15	+/-15	+/-190	5.7	9 - 36VDC	313	80	+/-68
PXC05-48WD15	+/-15	+/-190	5.7	18 - 75VDC	159	79	+/-68

DIP Pin Connection

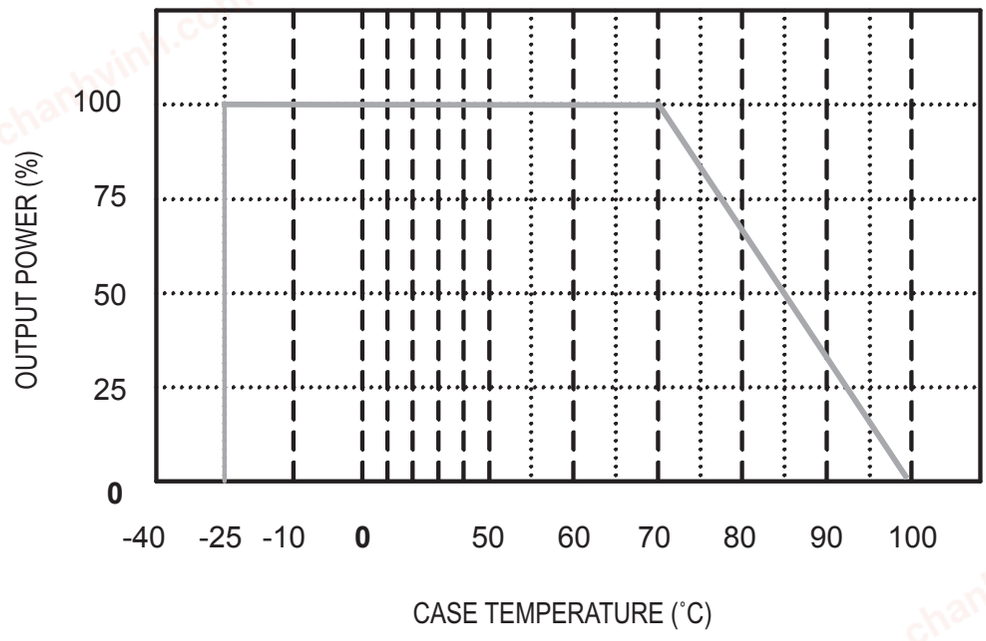
Pin #	Function	
	Single	Dual
2	- Input	- Input
3	- Input	- Input
9	NC	Common
10	no pin	no pin
11	NC	- Output
23	+ Input	+ Input
22	+ Input	+ Input
16	- Output	Common
15	no pin	no pin
14	+ Output	+ Output

SMD Pin Connection

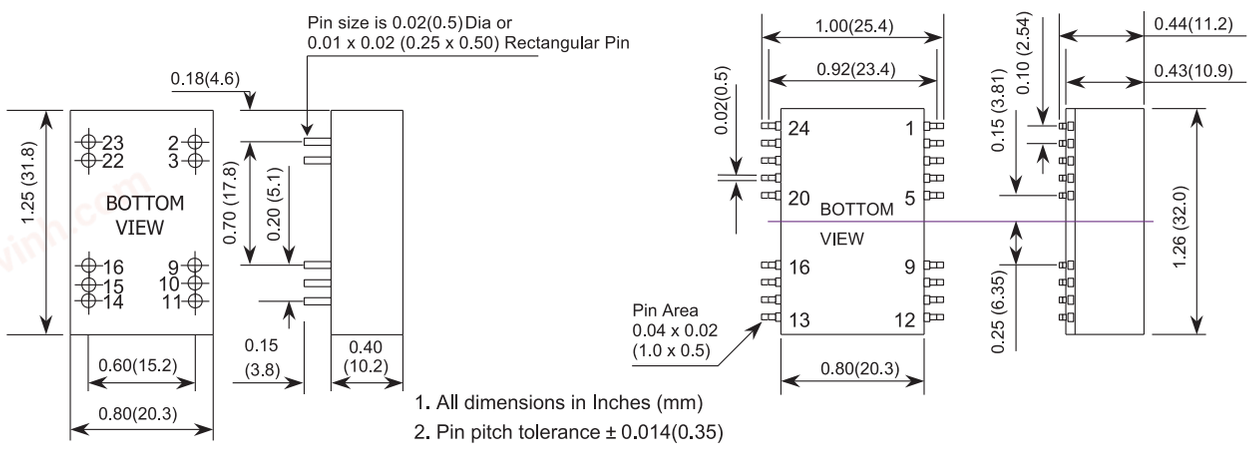
Pin #	Function	
	Single	Dual
2	- Input	- Input
3	- Input	- Input
9	NC	Common
10	NC	NC
11	NC	- Output
23	+ Input	+ Input
22	+ Input	+ Input
16	- Output	Common
15	NC	NC
14	+ Output	+ Output
Others	NC	NC

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Derating Curve PXC05 Series



Outline Drawing PXC05 Series



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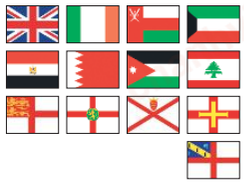
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