

6W DC-DC Converter P6Z-Series



- Wide 4:1 input range
- Up to 3500 V_{DC} isolation
- MTBF > 1,12 MHours
- Continuous short circuit protection
- Low profile metal package available

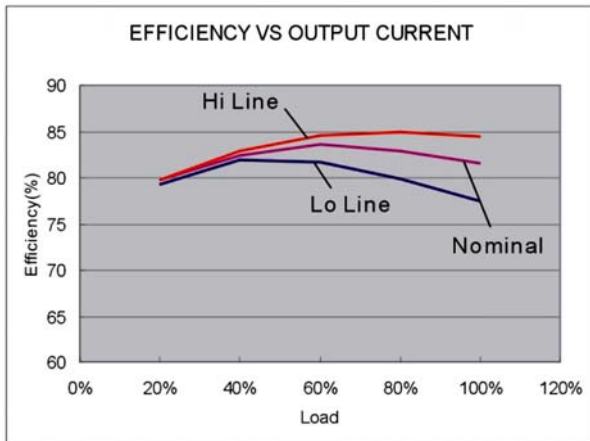


Model selection guide

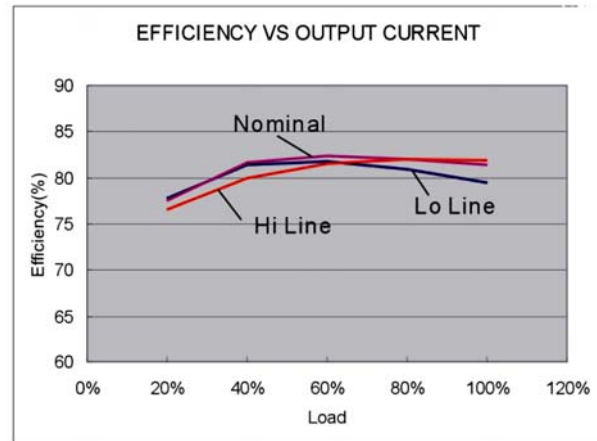
Typ	Input voltage nominal [V _{DC}]	Input current no load [mA]	Output voltage [V _{DC}]	Output current [mA]	Efficiency typ. [%]	Capacity load [μF]
Single output						
P6Z243R3S	9...36	20	3.3	1400	74	1000
P6Z2405S	9...36	25	5.0	1200	76	1000
P6Z247R2S	9...36	25	7.2	833	77	470
P6Z2409S	9...36	25	9.0	667	78	300
P6Z2412S	9...36	25	12.0	500	80	250
P6Z2415S	9...36	25	15.0	400	78	200
P6Z2418S	9...36	25	18.0	333	78	150
P6Z2424S	9...36	25	24.0	250	80	100
P6Z483R3S	18...72	20	3.3	1400	75	1000
P6Z4805S	18...72	23	5.0	1200	78	1000
P6Z487R2S	18...72	25	7.2	833	78	470
P6Z4809S	18...72	25	9.0	667	78	300
P6Z4812S	18...72	23	12.0	500	78	250
P6Z4815S	18...72	22	15.0	400	79	200
P6Z4818S	18...72	22	18.0	333	80	150
P6Z4824S	18...72	22	24.0	250	80	100
Dual output						
P6Z243R3D	9...36	20	±3.3	±909	79	2 x 680
P6Z2405D	9...36	25	±5.0	±600	81	2 x 330
P6Z247R2D	9...36	25	±7.2	±417	81	2 x 220
P6Z2409D	9...36	25	±9.0	±333	82	2 x 150
P6Z2412D	9...36	24	±12.0	±250	83	2 x 100
P6Z2415D	9...36	24	±15.0	±200	83	2 x 68
P6Z2418D	9...36	24	±18.0	±167	83	2 x 47
P6Z2424D	9...36	23	±24.0	±125	83	2 x 33
P6Z483R3D	18...72	20	±3.3	±909	79	2 x 680
P6Z4805D	18...72	23	±5.0	±600	81	2 x 330
P6Z487R2D	18...72	22	±7.2	±417	81	2 x 220
P6Z4809D	18...72	22	±9.0	±333	82	2 x 150
P6Z4812D	18...72	22	±12.0	±250	82	2 x 100
P6Z4815D	18...72	23	±15.0	±200	83	2 x 68
P6Z4818D	18...72	23	±18.0	±167	82	2 x 47
P6Z4824D	18...72	22	±24.0	±125	82	2 x 33

Suffix: "H" for 3.5kV isolation voltage

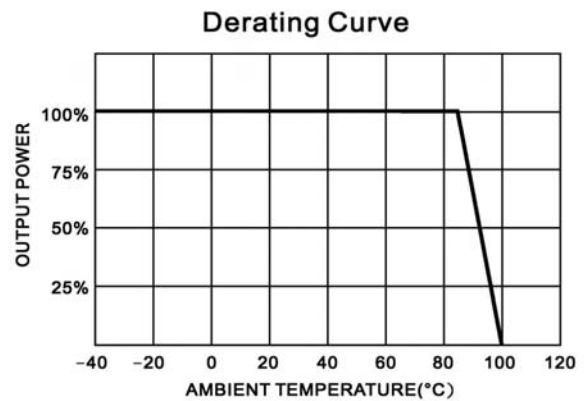
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Vin 24V Types



Vin 48V Types



6W DC-DC Converter P6Z-Series

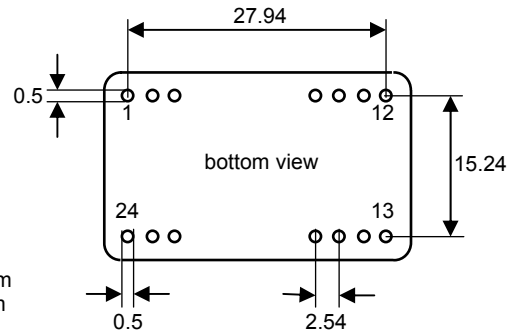
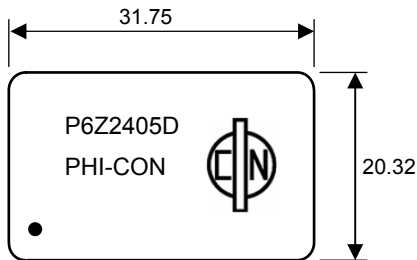


Specifications

Input :	
Voltage range	24 V _{DC} , 9...36 V _{DC} 48 V _{DC} , 18...72 V _{DC}
Filter	Pi Network
Isolation:	
Rated voltage	1500 V _{DC} , Standard 3500 V _{DC} , Suffix "H"
Resistance	10 ⁹ Ω
Capacitance	470 pF, typ.
Output:	
Voltage accuracy	± 1%, max.
Voltage balance (dual outputs)	± 1%
Ripple and noise (at 20 MHz BW)	60 mVp-p, max.
Short circuit protection	Continuous
Short circuit restart	Automatic
Line voltage regulation	± 0.5%, max.
Load voltage regulation	± 0.5%, max.
Temperature coefficient	± 0.02% / °C

General:	
Efficiency	74 to 80
Switching frequency	265 kHz, typ.
Test voltage I/O for 1s	1500Vdc H - type 3500Vdc
Safety in accordance with	IEC 60950-1:2001
Environmental:	
Operating temperature (ambient)	-40 °C to +85 °C
Case temperature	100 °C max.
Storage temperature	-40 °C to +125 °C
Derating	None required
Humidity	Up to 95%, non-condensing
Cooling	Free-air convection
Soldering temperature	260°C for 10s
Distance from body	1.5 mm
Physical :	
Dimensions	31.75x20.32x10.16 mm
Weight	17 g
Case material	Standard, nickel-coated copper

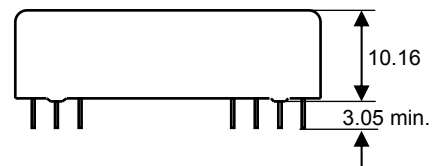
Dimensions



All dimensions in mm
Tolerance ±0.25 mm

Pin connections

Pin	Standard		3.5KV _{DC}	
	Single	Dual	Single	Dual
1	+V Input	+V Input	Omitted	Omitted
2	N.C.	-V Output	-V Input	-V Input
3	N.C.	Common	-V Input	-V Input
9	Omitted	Omitted	N.C.	Common
10	-V Output	Common	Omitted	Omitted
11	+V Output	+V Output	N.C.	-V Output
12	-V Input	-V Input	Omitted	Omitted
13	-V Input	-V Input	Omitted	Omitted
14	+V Output	+V Output	+V Output	+V Output
15	-V Output	Common	Omitted	Omitted
16	Omitted	Omitted	-V Output	Common
22	N.C.	Common	+V Input	+V Input
23	N.C.	-V Output	+V Input	+V Input
24	+V Input	+V Input	Omitted	Omitted



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Rev: 8.07 f