

DC-DC Converters



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PSW20 Series
20 Watt Wide Input
PCB Mounting
Single & Dual Outputs



Features

- 20W Isolated Output
- Efficiency to 84%
- 4:1 Input Range
- Pi Input Filter
- Continuous Short Circuit Protection
- Meets EN55022 Class A, Conducted
- Remote On/Off Control

MODEL	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		%EFF
				NO LOAD	FULL LOAD	
PSW20-24-33S		3.3 VDC	4000 mA	15 mA	705 mA	78
PSW20-24-05S		5 VDC	4000 mA	15 mA	1029 mA	81
PSW20-24-12S		12 VDC	1670 mA	15 mA	1006 mA	83
PSW20-24-15S	9-36 VDC	15 VDC	1330 mA	15 mA	1004 mA	83
PSW20-24-05D		+5 VDC	+2000 mA	20 mA	1004 mA	83
PSW20-24-12D		+12 VDC	+833 mA	20 mA	1004 mA	83
PSW20-24-15D		+15 VDC	+666 mA	20 mA	1004 mA	83
PSW20-48-33S		3.3 VDC	4000 mA	10 mA	353 mA	78
PSW20-48-05S		5 VDC	4000 mA	10 mA	508 mA	82
PSW20-48-12S		12 VDC	1670 mA	10 mA	497 mA	84
PSW20-48-15S	18-72 VDC	15 VDC	1330 mA	10 mA	496 mA	84
PSW20-48-05D		+5 VDC	+2000 mA	15 mA	496 mA	84
PSW20-48-12D		+12 VDC	+833 mA	15 mA	496 mA	84
PSW20-48-15D		+15 VDC	+666 mA	15 mA	496 mA	84

NOTE: 1. Nominal Input Voltage 24 or 48 VDC

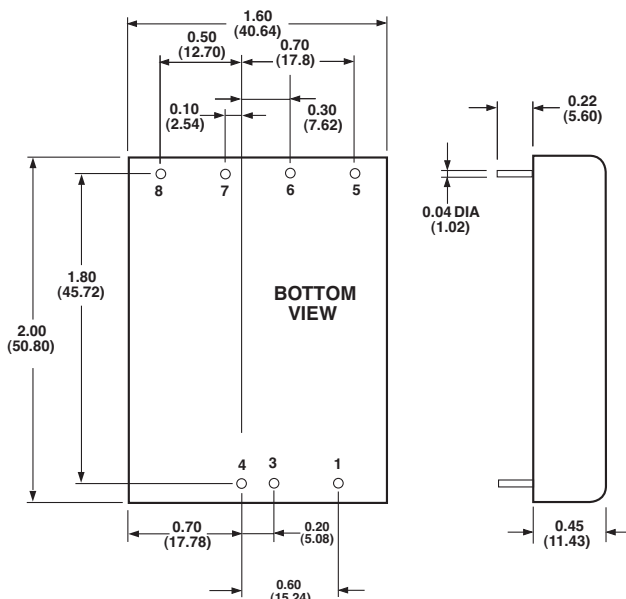
Electrical Specification

INPUT		
Input Voltage Range	24V	9-36V
	48V	18-72V
Input Filter		Pi Type
Positive Logic Remote ON/OFF		See Note 3
OUTPUT		
Voltage Accuracy Single Output		±1.0% max.
Voltage Accuracy Dual + Output		±1.0% max.
Voltage Accuracy Dual - Output		±2.0% max.
Voltage Balance, Dual Output at Full Load		±1.0% max.
Transient Response		
Single 25% Step Load Change		<500µsec.
Dual - FL-1/2L ±1% Error Band		<500µsec.
External Trim Adj. Range		±10%
Ripple & Noise, 20MHz BW,	20mV RMS., max. 75mV p-p, max.	
Temperature Coefficient		±0.02%/°C max.
Short Circuit Protection		Continuous
Line Regulation ¹ , Single/Dual Output		±0.5% max.
Load Regulation ² , Single/Dual Output		±0.5% max.
GENERAL		
Efficiency		See Table
Isolation Voltage		1500 VDC min.
Isolation Resistance		10 ⁸ ohms min.
Switching Frequency		300KHz, Typ.
Operating case Temperature		-25°C to +71°C
Derating, Above 60°C		Linearly to Zero Power at +100°C
Case Temperature		100°C max.
Storage Temperature Range		-55°C to +105°C
EMI/RFI		Six Sided Continuous Shield
Dimensions		2 x 1.6 x 0.45 inches (50.8 x 40.64 x 11.43 mm)
Case Material		Black Coated Copper with Non-Conductive Base

NOTE:

1. Measured From High Line to Low Line.
2. Measured From Full Load to $\frac{1}{4}$ Load.
3. Logic CompatibilityCMOS or Open Collector TTL
 ON> +5.5VDC or Open Circuit
 OFF< 1.8 VDC
 Control CommonReferenced to Input Minus

All Dimensions in Inches (mm)
Tolerance .xx = ±.04, .xxx = ±.010



All Specifications Typical At Nominal Line, Full Load and 25°C Unless Otherwise Noted.

Pin Connection

Pin	Single Output	Dual Output
1	On/Off Control	On/Off Control
3	-Vin	-Vin
4	+Vin	+Vin
5	Trim	Trim
6	-Vout	-Vout
7	+Vout	Common
8	No Pin	+Vout

External Output Trim

Output may optionally be externally trimmed (±10%) with a fixed resistor or an external trimpot as shown.

