

20 Watt DC/DC Converters

Key Features

- Wide Input Ranges
- Typical Efficiency of 81%
- Remote On/Off
- Overvoltage Protection
- Short circuit Protection
- Meets FCC Section 15 Sub Part J Class A Radiated and Conducted
- CE (LVD)
- Designed to meet UL60950



Applications

- Telecommunications Equipment
- Digital Circuits
- Private Branch Exchange
- Distributed Power Systems
- Analog Systems
- Industrial Control Systems

The 20 Watt DC/DC converters operate from a wide input range. This high density, low profile, small footprint converter is ideal for board mountable applications where space is at a premium.

General Electrical Specifications

(Specifications at Nominal Input and 25 C, nominal input voltage and rated output current unless otherwise noted.)

INPUT SPECIFICATIONS	
Input Voltage Range	See Selection Guide
Input Filter	LC
Input Current	See Selection Guide
Input Transient Voltage	100 VDC for 100 ms.
Reverse Voltage Protection	None
Startup & Shutdown Voltage	≤ (36) VDC @ 48 Vin; ≤18VDC @ 24Vin
Remote On/Off	
Enable	Open Circuit
Inhibit,	I sink < 0.1ma, < 0.5 VDC

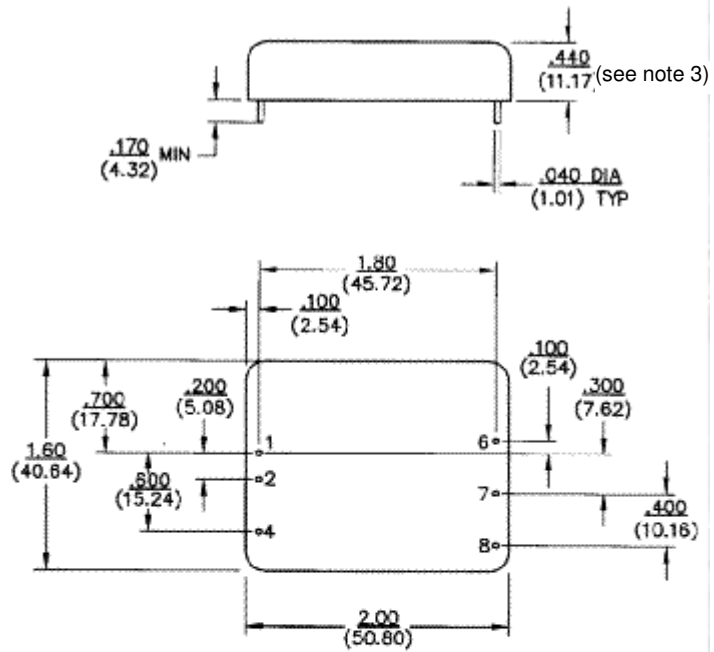
Output Specifications	
Voltage Variance/Regulation	3.3 ± 0.1 VDC 5.0 ± 0.15 VDC 12.0 ± 0.24 VDC
Output Adjustable Ripple & Noise	Yes 100 mv P-P (Max) 20 MHz Bandwidth
Transient Response	< 0.3 ms. ± 25% from 10% to 100% of rated load ± 5% voltage deviation
Load Current Maximum	6.0 Amps @ 3.3 VDC 4.0 Amps @ 5 VDC 1.8 Amps @ 12 VDC
Minimum	0 Amps
Short Circuit Protection	Continuous
Power Output	20 Watts
Overvoltage Protection	4.3 VDC, 3.3 VDC Output 6.2 VDC, 5.0 VDC Output 15.0 VDC, 12.0 VDC Output
GENERAL SPECIFICATIONS	
Isolation	1500 VDC
Operating Temperature (Ambient Air)	-25 to + 71 °C
Thermal Resistance (ca) Case to Ambient	11.5°C/W Typical
Storage Temperature	-25 to +100°C
Thermal Shutdown (TS Models Only)	+95°C

SELECTION GUIDE

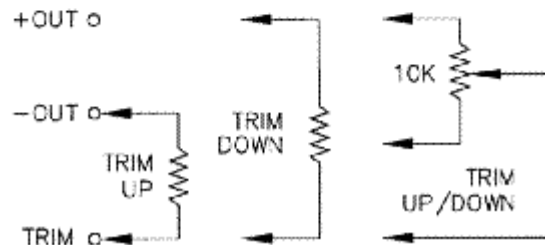
Device Type	Input Volts	Input Current A (Max)	Output Voltage	Output Current A (Max)
20B24R5S	18 - 36	1.068	4.85 - 5.15	4.0
20B48R3.3S	36 - 72	0.520	3.20 - 3.40	6.0
20B48R3.3TS	36 - 72	0.520	3.20 - 3.40	6.0
20B48R5S	36 - 75	0.534	4.85 - 5.15	4.0
20B48R12LP	18 - 72	0.536	11.76 - 12.24	1.8

Pin Connections

Pin	Connection
1	+ V Input
2	- V Input
3	No pin
4	Enable
5	No Pin
6	+ V Output
7	V Return
8	Adjust

Mechanical Specification (dimensions in inches)

Notes:

- All dimensions in parentheses are metric
- Tolerances unless otherwise specified:
 $.xx \pm .03$ (.76)
 $.xxx \pm .015$ (.38)
- Height of the 20B48R12LP is .400" (10.16)


Connections for Output Voltage Trim

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