

25 Watt DC/DC Converters

Key Features

- Wide Input 18 to 75 vdc
- Short Circuit Protection
- 1500 VDC Isolation
- Remote Shutdown
- External Trim Adjustment
- EN55022 Class A
- UL60950 Recognized
- Planar Magnetics
- CE (LVD)



Applications

- Telecom-Pac™ Designed for telecommunications Equipment
- Distributed Power Systems
- Wireless Base Stations
- Industrial Control System

Designed for the demanding requirements of the telecommunications industry. Manufactured with surface mount components and utilize planar magnetics.

General Electrical Specifications

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

Parameter	Limits	Conditions
V in	18 - 75 VDC Wide Input	
Efficiency	78 - 85 % Typical	Nominal Line, Full Load
I/O Isolation	1500 VDC	
Size	2" x 2" x 0.4"	
Operating Temperature	-40°C to +90°C Case	
Storage Temperature	-55°C to +125°C Case	
Temperature Coefficient	±0.02% per °C	
Ripple/Noise	75 mV Pk-Pk max	20MHz Bandwidth
Output Accuracy	± 2%	Full Load, Nominal Line
Line Regulation	± 0.2%	Full Load
Load Regulation	±0.5%	10 - 100% of Full Load
Short Circuit Protection	Continuous, Self-recovering	
Overvoltage	Clamp	130 - 150% of Output, Recovers
Remote On/Off	Open Collector referenced to Pin 2	High or Floating - Enable Low - Disable
CE	LVD	
Transient Response	See Note	
Minimum Load Required	10% of Full Load	
EMI-RFI	EN55022 Class A	
Case	Copper	

Note: Transient Response. The output step load response for a step change in load from 100% to 50% will recover to a final output voltage no greater than 0.5% above the 100% load output voltage. This recovery will typically be within 300 microseconds with a maximum overshoot of 5% of the final output voltage. The recovery voltage overshoot/undershoot will have no more than three crossovers of the final output voltage.

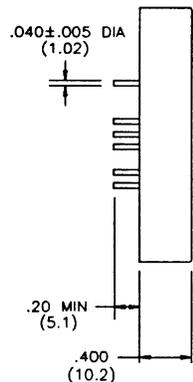
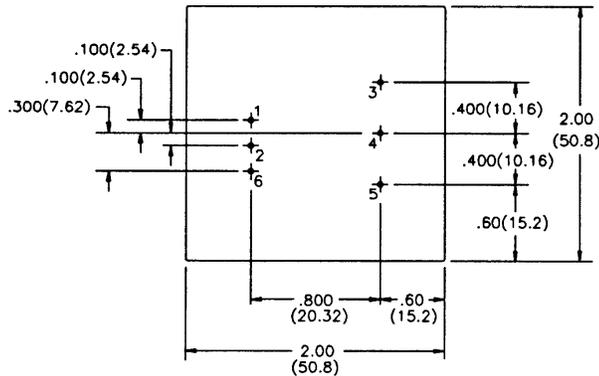
The output step load response for a step change in load from 50% to 100% will recover to a final output voltage no less than 0.5% below the 10% load output voltage. This recovery will typically be within 300 microseconds with a maximum undershoot of 5% of the final output voltage. The recovery voltage overshoot/undershoot will have no more than three crossovers of the final output voltage.

SELECTION GUIDE

Device Type	Input Voltage Range VDC	Input Current A(Max)	Output Voltage VDC	Output Current A(Max)
25A48R3.3	18 - 75	.70	3.3	7.50
25A48R5	18 - 75	.70	5.0	5.00
25A48R5SS*	18 - 75	.70	5.0	5.00
25A48R12	18 - 75	.70	12.0	2.08
25A48R13.2	18 - 75	.75	13.2	2.00
25A48R15	18 - 75	.70	15.0	1.67
25A48R16	18 - 75	.70	16.0	1.56

*SS – Soft-Start; V_{out} rises monotonically to the final value in $\approx 40ms$. Approximately 0.6-second power on delay.

Mechanical Specification (dimensions in inches)



Notes (all devices and packages):

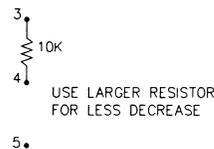
- All dimensions in parentheses are metric
- Tolerances unless otherwise specified:
 $.xx \pm .03$ (.76)
 $.xxx \pm .015$ (.38)
- Pin 6 is optional

Pin Connections:

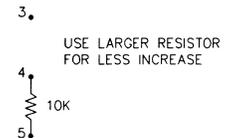
Pin	Single Output
1	+ Input
2	- Inout
3	+ Output
4	Adjust (+5V only)
5	Output Common
6	Enable

TRIM OUTPUT WITH RESPECT TO PIN 5

10% DECREASE



10% INCREASE



Reliability Power Locations

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