

## 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	±.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.

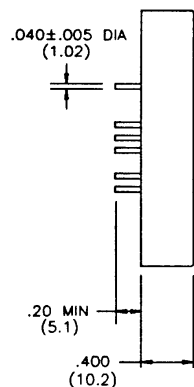
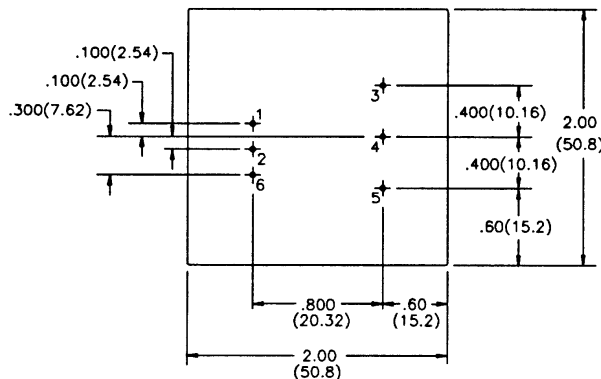
The output step load response for a step change in load from 50% to 100% will recover to a final output voltage no less than 0.5% below the 10% load output voltage. This recovery will typically be within 300 microseconds with a maximum undershoot of 5% of the final output voltage. The recovery voltage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

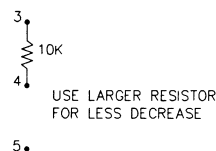
1. All dimensions in parentheses are metric
2. Tolerances unless otherwise specified:  
 $.xx \pm .03$  (.76)  
 $.xxx \pm .015$  (.38)
3. Pin 6 is optional

## Pin Connections:

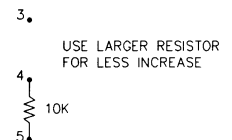
Pin	Single Output
1	+ Input
2	- Inout
3	+ Output
4	Adjust (+5V only)
5	Output Common
6	Enable

TRIM OUTPUT WITH RESPECT TO PIN 5

10% DECREASE



10% INCREASE



## Reliability Power Locations

HEADQUARTERS & CUSTOMER SERVICE	SALES
Reliability Power, Incorporated 33 Musick Irvine, CA 92618 USA Tel: (949) 305-6700 Fax: (949) 305-6701 <a href="http://www.reliabilitypower.com">www.reliabilitypower.com</a>	Reliability Power, Incorporated Attention: SALES  Tel: (805) 449-1667 Fax: (805) 557-4530 <a href="mailto:sales@reliabilitypower.com">sales@reliabilitypower.com</a>