

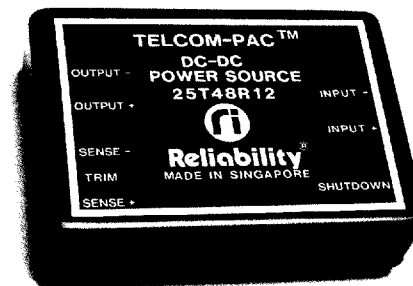
TELCOM-PAC™

25/30 WATT DC/DC CONVERTERS

FOR TELECOMMUNICATIONS

KEY FEATURES

- Designed For Telecommunications & Wide Input Applications
- Input/Output Isolated
- Short Circuit Protection
- Pi Input Filter
- No Derating To 71°C
- Designed To Meet FCC SEC 15, Sub-part J, Class B Radiated, Class A Conducted
- 100% Burned-In And Triple Tested
- Efficiencies Exceed 75%
- Six-Sided Copper Shielding
- 3 Year Warranty



SPECIAL FEATURES

- Remote Sense
- External Trim Adjustment ($\pm 10\%$)
- Remote Shutdown

APPLICATIONS

- Test Equipment
- Analog Networks
- Distributed Power Systems
- Telecommunications Systems

DESCRIPTION

The 25/30 Watt Telcom-Pac DC/DC converters are designed for the demanding requirements of the telecommunications industry. The encapsulated construction includes six sided copper shielding and a built-in π input filter to minimize reflected ripple. A shunt diode also protects the converter from reverse input polarity.

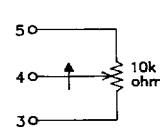
The 25/30 Watt Telcom-Pac DC/DC converters provide several special features. The output voltage sense enables the converters to achieve accurate output voltage and optimum regulation at the load. The remote shutdown feature allows power on/off with a 5 volt logic signal. An external adjustment trims the output to a desired voltage level.

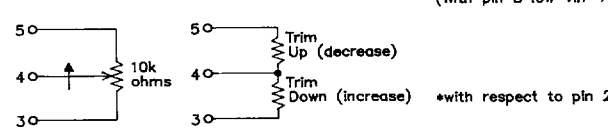
SELECTION GUIDE

Standard Products

DEVICE TYPE	INPUT VOLTAGE RANGE VDC	INPUT CURRENT A (MAX)	OUTPUT VOLTAGE VDC	OUTPUT CURRENT A (MAX)	PACKAGE / PINOUT
25T48R5	20 - 72	.690	5.0	5.0	T
25T48R12	20 - 72	.780	12.0	2.5	T
25T48R15	20 - 72	.780	15.0	2.0	T

APPLICATION NOTES FOR SPECIAL FEATURES

REMOTE OUTPUT	EXTERNAL TRIMMING OF OUTPUT	REMOTE SHUTDOWN
<p>Connect pin 3 to "+" side of load and connect pin 5 to "-" side of load (see Fig. 1). If remote sense is not used connect pin 3 to pin 6 and pin 5 to pin 7 (see Fig. 2)</p>	<p>The output voltage may be trimmed ($\pm 10\%$) by connecting a trimpot or a fix resistor as shown.</p> 	<p>Connect Logic Signal to pin 8 Low (unit is off) *0 to 0.4VDC High (unit is on) *5.0 to 72VDC or open Input Idle Current 15mA Max (With pin 8 low V_{in}=72VDC)</p>

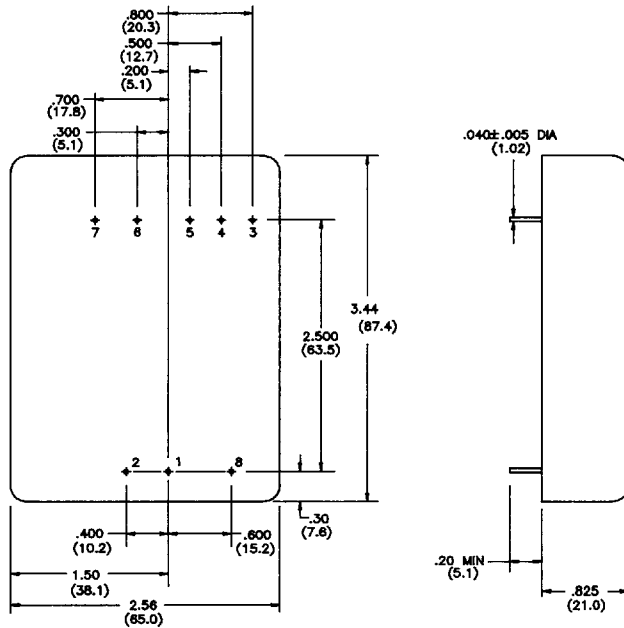


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GENERAL ELECTRICAL SPECIFICATIONS

(Specifications at Nominal Input and 25°C)

PARAMETER	LIMIT	CONDITIONS
Input Voltage Range	20 - 72 VDC	All Device Types
Input Filter	Pi Network	All Device Types
Reflected Input Ripple	25ma, P-P (Max.)	Nom. Line at Full Load
Input/Output Isolation	500 VDC	All Units
Leakage Current	<0.5 μ A	With 500 VDC Applied
Output Voltage Accuracy	$\pm 1.0\%$	Nom. Line at Full Load
Load Regulation	25mv	20%-Full Load (with remote sense connected)
Line Regulation	25mv	20-72 VDC (with remote sense connected)
Temperature Coefficient	$\pm 0.02\%/^{\circ}\text{C}$	Typical
Output Noise/Ripple	50mv, P-P (Max.)	20Hz-20MHz Bandwidth
Short Circuit Protection	Constant Current	Continuous
Switching Frequency	85KHz	Typical
Operating Temperature	-25°C to +71°C	All Units
Derating	None	To 71°C
Storage Temperature	-55°C to +125°C	Connected to Pin 2
Shielded Case	Six-Sided Copper	
Undervoltage Lockout	18VDC $\pm 10\%$	
Turn-on Time	50msecs (Max.)	Nom. Line at Full Load
Transient Response	200 μ secs	25% Step Load Change
FCC Sect. 15 Sub Part J	Yes	Class B Radiated, Class A Conducted



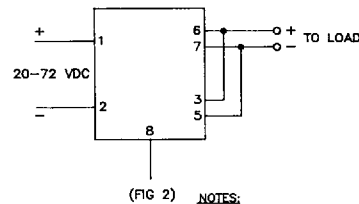
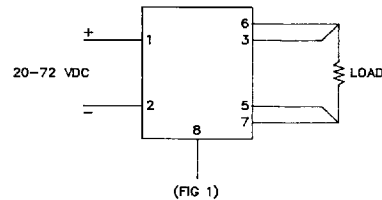
PIN	SINGLE OUTPUT
1	+INPUT
2	-INPUT
3	+O/P SENSE/TRIM
4	TRIM
5	-O/P SENSE/TRIM
6	+OUTPUT
7	-OUTPUT
8	REMOTE ON/OFF

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- NOTES:
1. ALL DIMENSIONS IN PARENTHESES ARE METRIC.
2. TOLERANCES UNLESS OTHERWISE SPECIFIED: .XX = ± 0.03 (.76)
.XXX = ± 0.015 (.38)

Note:
When the output is trimmed high or remote sensing is used, reduce the maximum output current to ensure that the maximum output power is not exceeded

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These products are not authorized for use as critical components in life support devices or systems without the express written approval of an officer of Reliability Incorporated.

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