

DC/DC 18 Watts Single Output TUM/TUC Series

- 4:1 ultra wide input range
— 9 - 36 Vdc
— 20 - 72 Vdc
- Remote shutdown
- 200 kHz switching frequency
- Continuous short circuit protection
- Six-Sided Shielding

The 18-Watt TUC/TUM Series operates over an ultra wide input range of 9 - 36 Vdc or 20 - 72 Vdc. Efficiencies of 77% are typical over varying load conditions of 25% to 100%. Additional features include input reverse polarity protection, remote on/off control, logic compatible with CMOS or open collector TTL, short circuit protection with auto restart, overvoltage protection, and an operating temperature range of -25°C to +71°C with no derating.

Applications

These units are ideally suited for telecommunications and applications having a widely varying input voltage such as automotive test equipment, process control, minicomputers, and Geosurvey equipment.



Specifications

INPUT

Voltage Range	9 - 36 Vdc, 20 - 72 Vdc
Filtering	All Models
Reverse Polarity Protected	To Nominal Input Current - External Fuse Required
Remote On/Off Control	All Models

OUTPUT

Voltage Tolerance	± 1%
Ripple and Noise	50mV p-p (max.)
Short Circuit Protection	Continuous - Auto Restart
Temperature Coefficient	0.02%/°C max.

GENERAL

Regulation:	
Line	± .25%
Load	± .5%
Efficiency	77%(typ.)
I/O Isolation	2500 Vdc - Input to Output
Switching Frequency	200 kHz

ENVIRONMENTAL

Operating Temperature Range	-25°C to +71°C - No Derating
Storage Temperature Range	-40°C to +105°C
Cooling	Free-air Convection



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All specifications are typical at nominal line and full load at 25°C unless otherwise noted.

TUM/TUC Series Ordering Information

T-57-11

Input Voltage Range	Output Voltage	Output Current	Model Pkg. 1	Model Pkg. 2
9-36V 20-72V	5 Vdc 5 Vdc	3500 mA 3500 mA	TUM11-350-18 TUM11-350-48	TUC11-350-18 TUC11-350-48
9-36V 20-72V	12 Vdc 12 Vdc	1500 mA 1500 mA	TUM12-150-18 TUM12-150-48	TUC12-150-18 TUC12-150-48
9-36V 20-72V	15 Vdc 15 Vdc	1200 mA 1200 mA	TUM13-120-18 TUM13-120-48	TUC13-120-18 TUC13-120-48

Dimensions and Connections

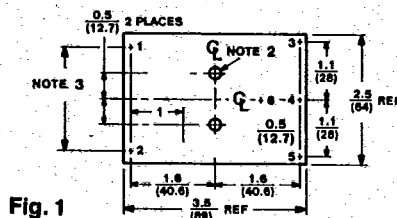
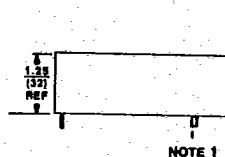
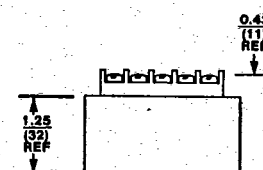


Fig. 1



- Connections**
PIN/TERMINAL
 1 +Vdc in
 2 -Vdc in (com)
 3 +Vdc out
 4 No Connect
 5 -Vdc out (com)

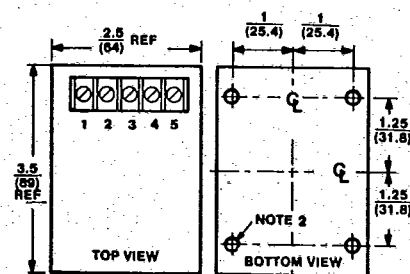


Fig. 2

- Notes:**
 1. Five Pins, 0.040 (1) Dia x 0.20 (5.1) Lg Min
 2. Mounting Inserts 4-40 x 0.1 (2.5) Dp Min (pkg. 2 only)
 3. Dimensions are given in both inches and (mm)
 4. External Output Trimming: Output may be externally trimmed ± 10%

