

- **3:1 Input Range for railway System**
- **Efficiency to 92%**
- **Quarter-brick Package**
- **OTP/ OCP/ OVP**
- **Remote ON/OFF**
- **continuous short circuit Protection**
- **meets EN50155 with external circuits**



Model Number	Input Voltage	Output Voltage	Output Current max	Input No Load	Current Full Load	% Eff.	Capac. Load max.
TPQ100T-110S05	60 – 160 V	5 VDC	20 A	30 mA	1010 mA	90	10mF
TPQ100T-110S12	60 – 160 V	12 VDC	8.4 A	40 mA	993 mA	92	8.8mF
TPQ100T-110S24	60 – 160 V	24 VDC	4.2 A	60 mA	1030 mA	91	1.5mF

All Specifications are Typical at Nominal Line 110VDC, Full load, and 25°C Unless Otherwise Noted / © TP 2013

INPUT SPECIFICATIONS

INPUT VOLTAGE RANGE110V 66V – 160VDC
 INPUT SURGE VOLTGE (100ms max) 180VDC max
 INPUT UNDER-VOLTAGE LOCKOUT..... power down 56V
 power up..... 62V

POSITIVE LOGIC REMOTE ON/OFF CONTROL
 Logic Compatibility CMOS or Open Collector TTL, ref. to –Vin
 Module ON >+3.5 to 75VDC or Open Circuit
 Module OFF..... <1.8 Vdc

INPUT FILTER..... PI Type

OUTPUT SPECIFICATIONS

Voltage Accuracy.....		±1.5% max
Ripple and Noise, 20MHz BW	Vo = 5V	max. 100mVpp.
	Vo = 12V	max. 150mVpp.
	Vo = 24V	max. 240mVpp.
Temperature Coefficient		±0.03%/C max
Line Regulation		±0.2%.
Load Regulation		±0.2%.
External Trim Adj. Range		±10%
Short Circuit Protection		continuous
Over Voltage Protection % Vo nom.....		115 – 140%
Current Limit		110% - 180% Nominal Output
Start up time		45ms typ.

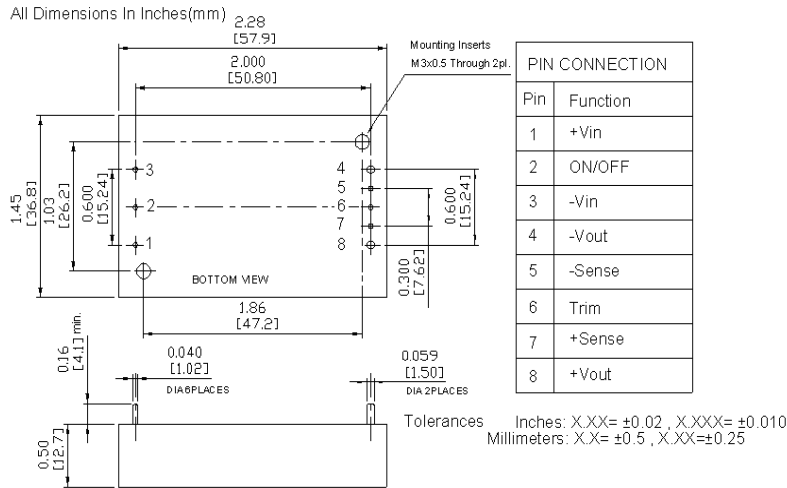
GENERAL SPECIFICATIONS

ISOLATION VOLTAGE.....	Input/ Output; Input/Case	2250VDC min
	Output/Case	1500VDC min
ISOLATION RESISTANCE		10 MOhm
ISOLATION CAPACITANCE		1000pF typ.
SWITCHING FREQUENCY.....		200KHz typ.
OPERATING TEMPERATURE RANGE.....		-40°C TO +100°C
THERMAL SHUT DOWN; CASE TEMPERATURE		105°C typ.
STORAGE TEMPERATURE RANGE.....		-40°C TO +105°C
EMC		meets EN50155 (EN50121-3-2) with external filter
SHOCK/VIBRATION		meets EN50155 (EN61373)
ENVIRONMENTAL		meets EN50155 (EN60068-2-1)
CASE MATERIAL		Aluminium base plate with plastic case
DIMENSIONS		1,45×2,28×0.50 INCHES (36.8 × 57.9 × 12.7mm)

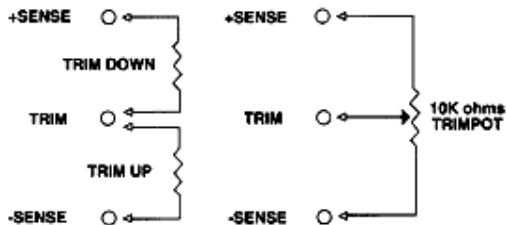
NOTE:

1. LINE REGULATION: Measured From High Line To Low Line
2. LOAD REGULATION: Measured From Full Load To Zero Load
3. Output ripple and noise measured with 10µF tantalum and 1µF ceramic capacitor across output
4. Suffix "N" to the model number with negative logic remote ON/OFF
5. Suffix "C" to the model number with clear mounting insert (3.2mm diameter)
6. An external input capacitor 120µF for all models are recommended to reduce input ripple voltage

MECHANICAL SPECIFICATIONS



External Output TRIM



REMOTE ON/OFF CONTROL

Logic Compatibility: CMOS or Open collector TTL ref. to -Vin
 Modul ON: >+3.5 to 75VDC or Open Circuit
 Module OFF: <1.8 Vdc

