

- Efficiency to 90%
- Safety meets EN60950-1
- Half-brick Package
- OCP/ OVP/ OTP
- continuous short circuit Protection
- Remote ON/OFF



Model Number	Input Voltage	Output Voltage	Output Current	Input Current		% Eff.	Max capacitive Load
				No Load	Full Load		
TP300W-24S05	9 - 36 V	5 VDC	60 A	200 mA	14.12 A	88	470-10.000µF
TP300W-24S12	9 - 36 V	12 VDC	25 A	200 mA	13.74 A	91	470-10.000µF
TP300W-24S24	9 - 36 V	24 VDC	12.5A	120 mA	14.20 A	88	470-4.700µF
TP300W-24S28	9 - 36 V	28 VDC	10.7A	120 mA	14.12 A	88	470-4.700µF
TP300W-24S48	9 - 36 V	48 VDC	6.25A	120 mA	14.12 A	88	470-2.200µF
TP300W-48S05	18 - 75 V	5 VDC	60 A	100 mA	6.94 A	90	220-10.000µF
TP300W-48S12	18 - 75 V	12 VDC	25 A	100 mA	6.94 A	90	220-10.000µF
TP300W-48S24	18 - 75 V	24 VDC	12.5A	80 mA	6.98 A	89	220-4.700µF
TP300W-48S28	18 - 75 V	28 VDC	10.7A	80 mA	6.94 A	90	220-4.700µF
TP300W-48S48	18 - 75 V	48 VDC	6.25A	80 mA	7.02 A	89	220-2.200µF

All Specifications are Typical at Nominal Line, Full load, and 25°C Unless Otherwise Noted / © TECHNO-PROJEKT 2015

NOTE: Measured at Nominal Input Voltage 24VDC, 48VDC

### INPUT SPECIFICATIONS

INPUT SURGE VOLTAGE (100ms max).....	48V .....	100VDC max
INPUT UNDER-VOLTAGE LOCKOUT.....	48Vin power down .....	17V typ
	48Vin power up .....	16V typ
POSITIVE LOGIC REMOTE ON/OFF CONTROL		
Logic Compatibility .....		Open Collector TTL, ref. to -Vin
Module ON .....		>+3.5 to 75VDC or Open Circuit
Module OFF.....		<1.2 Vdc
INPUT FILTER.....		PI Type

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### OUTPUT SPECIFICATIONS

Voltage Accuracy.....	±1.5% max
Transient Response: 25% step load change .....	< 500µs
Ripple and Noise, 20MHz BW .....	Vo = 5V..... max. 100mVpp.
	Vo = 12V .....
	Vo = 24V & 28V .....
	Vo = 48V .....
Temperature Coefficient .....	±0.03%/C max
Line Regulation <sup>(1)</sup> .....	±0.2%.
Load Regulation <sup>(2)</sup> .....	±0.2%.
External Trim Adj. Range <sup>(6)</sup> .....	±10%
Short Circuit Protection .....	continuous
Over Voltage Protection.....	115 – 140%
Current Limit .....	120% - 160% Nominal Output
Start up time .....	120ms typ

### GENERAL SPECIFICATIONS

ISOLATION VOLTAGE.....	Input/ Output .....	1500VDC max.
	Input/Case, Output/ Case .....	1500VDC max.
ISOLATION RESISTANCE .....		10 MOhm
ISOLATION CAPACITANCE .....		2000pF typ.
SWITCHING FREQUENCY.....		220KHz typ.
OPERATING TEMPERATURE RANGE.....		-40°C TO +100°C
THERMAL SHUT DOWN; CASE TEMPERATURE .....	∴	110°Cmax.
STORAGE TEMPERATURE RANGE.....		-55°C TO +105°C
CASE MATERIAL .....		Aluminium Base Plate with Plastic Case
DIMENSIONS .....	∴	2,28×2,40×0.50 INCHES (57.9 × 61.0 × 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 is measured with 10µF tantalum (24S05 with 330µF tantalum, 24S12 with 100µF tantalum an 48Vout with 10µF Aluminium) and 1µF Ceramic capacitor across output
4. Suffix "N" to the model number with negative logic remote ON/OFF
 

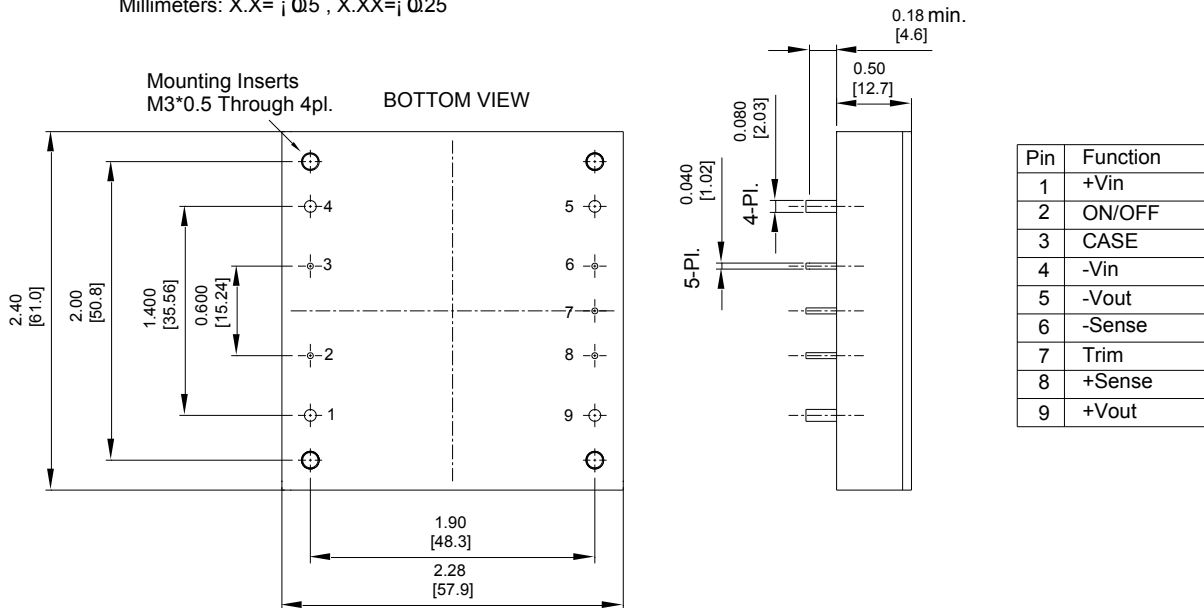
Modul ON	< 1.2Vdc
Modul OFF	> 3.5Vdc to 75Vdc or Open Circuit
5. Suffix "C" to the model number with clear mounting insert (3.2mm DIA)
6. Trim up connect a resistor between the trim pin and + Sense
7. Trim down connect a resistor between the trim pin and – Sense
8. The input terminal recommend to parallel with 220µF for 48Vin and 1000µF for 24Vin; ESR < 0.7 Ohm to reduce the input ripple voltage.

### MECHANICAL SPECIFICATIONS

All Dimensions In Inches(mm)

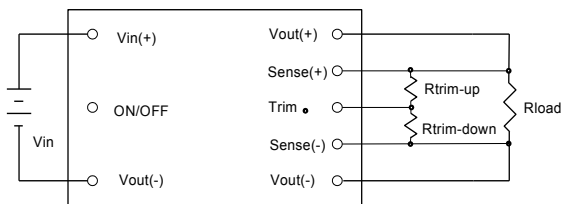
Tolerances Inches: X.XX=  $\pm 0.02$  , X.XXX=  $\pm 0.010$

Millimeters: X.X=  $\pm 0.5$  , X.XX= $\pm 0.25$



### External Output TRIM

### REMOTE ON/OFF CONTROL



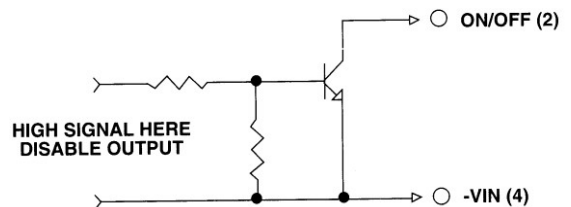
Logic Compatibility CMOS or Open collector TTL  
 Modul ON >+3.5 to 75VDC or Open Circuit  
 Module OFF <1.2 Vdc

$$R_{trim-down} = \left[ \frac{511}{\Delta\%} - 10.22 \right] k\Omega$$

Example: reduction Vout -5%  
 With  $\Delta\% = 5 \rightarrow R_{trim} = 92k\Omega$

$$R_{trim-up} = \left[ \frac{5.11V_{out}(100 + \Delta\%)}{1.225 \times \Delta\%} - \frac{511}{\Delta\%} - 10.22 \right] k\Omega$$

Example: Increasing Vout +5%  
 With  $\Delta\% = 5 \rightarrow R_{trim} = 937k\Omega$



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