



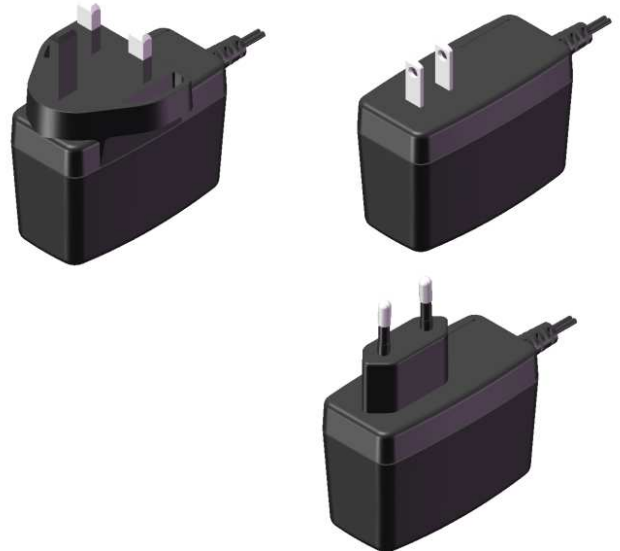
# TRE25 SERIES

## 25W SWITCHING ADAPTER



### Features

- \* Miniature Size
- \* Universal Input: 90~264Vac
- \* EMI Meets EN55022 Class B and CISPR/FCC Class B
- \* Continuous Short Circuit Protection
- \* Over Voltage Protection
- \* Meet CoC V5 Tier 2 & DoE Level VI  
(Output Cable Length  $\leq$  1800mm)  
(TRE25050: Output Cable Length  $\leq$  1220mm)
- \* No Load Power Consumption < 75mW



### Ordering information

| TRE25XXX  | - | X                | XX           | G                | XX                                       |
|-----------|---|------------------|--------------|------------------|------------------------------------------|
| Model No. |   | AC Plug Type     | DC Plug Type | UL 1571 WITH OVP | DC Cable Length and Type                 |
|           |   | A: USA 2 Pin     |              |                  | 01: 720mm                                |
|           |   | E: Europe 2 Pin  |              |                  | 02: 1220mm                               |
|           |   | U: British 3 Pin |              |                  | 03: 1800mm                               |
|           |   |                  |              |                  | 11: 720mm with Ferrite Core              |
|           |   |                  |              |                  | 12: 1220mm with Ferrite Core             |
|           |   |                  |              |                  | 13: 1800mm with Ferrite Core             |
|           |   |                  |              |                  | * 20AWG / UL1571 or Equivalent           |
|           |   |                  |              |                  | * 16AWG / UL1571 for Vo:5V or Equivalent |

| MODEL    | OUTPUT VOLTAGE | OUTPUT CURRENT | RIPPLE & NOISE<br>NOTE 1 | VOLTAGE ACCURACY<br>NOTE 2 | LINE REGULATION<br>NOTE 3 | LOAD REGULATION<br>NOTE 4 | AVG.ERAGE<br>EFF. min. |
|----------|----------------|----------------|--------------------------|----------------------------|---------------------------|---------------------------|------------------------|
| TRE25050 | 5V             | 4A             | 50mVp-p                  | ±2%                        | ±1%                       | ±6%                       | 83.7%                  |
| TRE25120 | 12V            | 2.1A           | 1%                       | ±2%                        | ±1%                       | ±5%                       | 87.0%                  |
| TRE25150 | 15V            | 1.67A          | 1%                       | ±2%                        | ±1%                       | ±3%                       | 87.0%                  |
| TRE25180 | 18V            | 1.4A           | 1%                       | ±2%                        | ±1%                       | ±2%                       | 87.0%                  |
| TRE25240 | 24V            | 1.05A          | 1%                       | ±2%                        | ±1%                       | ±2%                       | 87.0%                  |

Specifications are subject to change without notice.

## Specifications

### INPUT SPECIFICATIONS:

|                 |                   |
|-----------------|-------------------|
| Voltage         | 90~264Vac         |
| Frequency       | 47 to 63Hz        |
| Input Current   | 0.7A max.         |
| Inrush Current  | 60A max. @240Vac  |
| Conducted EMI   | CISPR/FCC Class B |
| Leakage Current | 0.25mA max.       |

### OUTPUT SPECIFICATIONS:

|                          |                           |
|--------------------------|---------------------------|
| Holdup Time              | 10ms typ. @115Vac         |
| Short Circuit Protection | Continuous(Auto Recovery) |
| Over Voltage Protection  | IC Component to Clamp     |
| Temperature Coefficient  | ±0.05%/°C                 |

### GENERAL SPECIFICATIONS:

|                       |                                              |
|-----------------------|----------------------------------------------|
| Isolation             | Input to output = 3,000VAC                   |
| Operating Temperature | -20~60°C (see derating curve)                |
| Storage Temperature   | -20~85°C                                     |
| Humidity              | 93% RH max. Non condensing                   |
| Cooling               | Natural Convection                           |
| Switching Frequency   | 65KHz typ.                                   |
| MTBF                  | MIL-HDBK-217F, GB, 25°C/115VAC 300K hrs min. |
| Altitude              | 2000m                                        |
| Life time             | Ambient 40degC 75% Load >3years              |
| Dimensions            | 2.795x1.906x1.299Inches (71.00x48.4x33.00mm) |
| Weight                | 140g(0.31 Pounds)                            |

### Mechanical Specification

All Dimensions are in inches[mm]

Tolerance:Inches:X.XXX±0.02

Millimeters:X.XX±0.5

FIG.E



FIG.U



## TRE25 Series Derating Curve



### SAFETY AND EMC:

|                       |                                                                                                                  |
|-----------------------|------------------------------------------------------------------------------------------------------------------|
| Emission and Immunity | EN55022 Class B, FCC Part 15 Class B<br>EN61000-6-3, EN61000-3-2, EN61000-3-3<br>EN55024, EN61204-3, EN61000-6-1 |
| Safety                | Class II, IEC60950-1, EN60950-1, UL60950-1                                                                       |

### NOTE:

1. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for ripple & noise measuring @20MHz BW.
2. Voltage setpoint at 60% full load.
3. Line regulation measured from 100Vac to 240Vac, full load.
4. Load regulation measured from 60% to 100% full load and from 60% to 20% load (60% +/- 40% full load).

FIG.A

