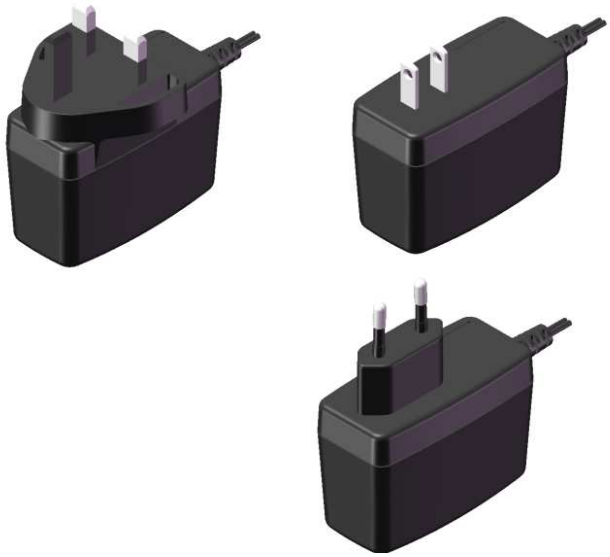
# TRE25 SERIES

## 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 ≦ 1800mm) (TRE25050: Output Cable Length ≦ 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 NOTE 1 | VOLTAGE ACCURACY NOTE 2 | LINE REGULATION NOTE 3 | LOAD REGULATION NOTE 4 | AVG.ERAGE 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.

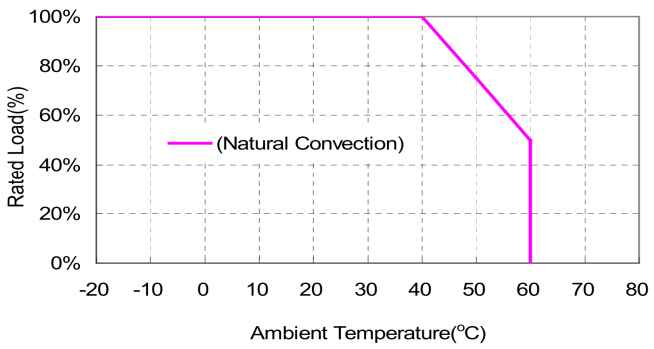
## OUTPUT SPECIFICATIONS:

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

## GENERAL SPECIFICATIONS:

Isolation ..... Input to output = 3,000VAC
Operating Temperature ..... -20~60℃(see derating curve)
Storage Temperature ..... -20~85℃
Humidity ..... 93% RH max. Non condensing
Cooling ..... Natural Convection
Switching Frequency ..... 65KHz typ.
MTBF ..... MIL-HDBK-217F, GB, 25℃/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)

# TRE25 Series Derating Curve




## SAFETY AND EMC:

Emission and Immunity ..... EN55022 Class B, FCC Part 15 Class B
EN61000-6-3, EN61000-3-2, EN61000-3-3
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).

## *Mechanical Specification*

All Dimensions are in inches[mm]
Tolerance:Inches:X.XXX±0.02
Millimeters:X.XX±0.5

FIG.E

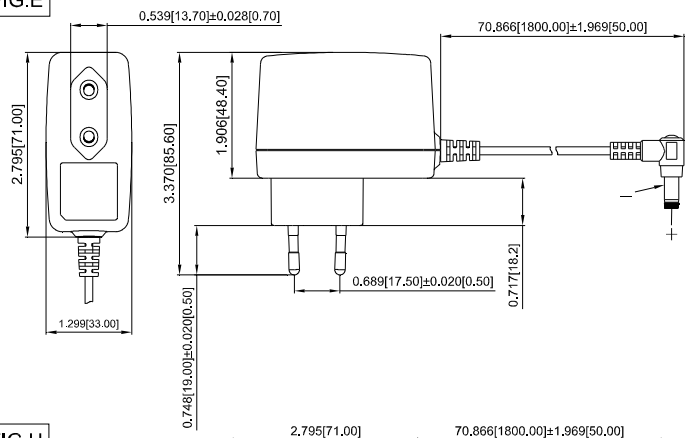



FIG.A

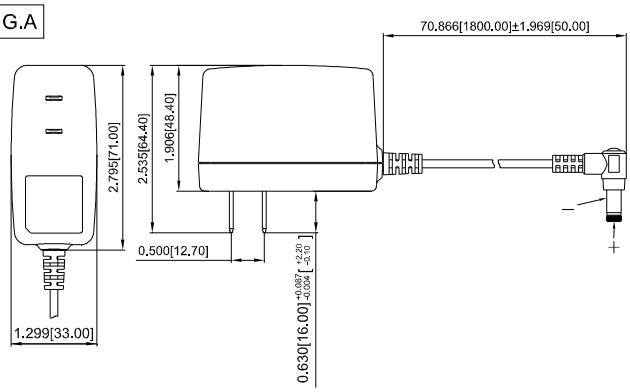
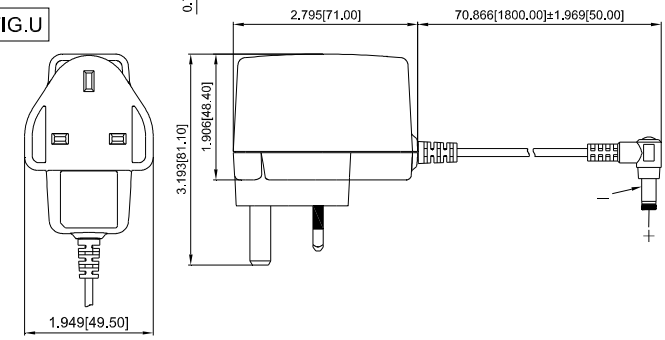



FIG.U




*Typical at 25˚C, nominal line and 75% load, unless otherwise Specified*