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69-D48 12VDC, 48W Switching Desk Top Power Supply 2.1mm I.D. x 5.5mm O.D. Plug

Description:

This document introduces the electrical, mechanical and environmental specifications of a switching power supply.



INPUT REQUIREMENT:

| Item | Specification | Min | Typ | Max |
|-------------------------|---|--------|---------------|--------|
| Normal AC Input Voltage | Single Phase | 100VAC | 110VAC/220VAC | 240VAC |
| AC Input Voltage Range | Single Phase | 90VAC | 110VAC/220VAC | 264VAC |
| AC Input Frequency | Single Phase | 47Hz | 50/60Hz | 63Hz |
| AC Input Current | Typical Input Voltage & Output at Full Load | - | - | 1200mA |
| AC Inrush Current | Typical Inputs Voltage & Output at Full Load, +25°C | - | - | 30A |
| Average Efficiency | Typical Input Voltage & Output at (Full Load) | - | - | - |

OUTPUT SPECIFICATION:

| Item | Specification | Min | Typ | Max |
|--------------------------|---|-------|-------|-------|
| Normal DC Output Voltage | | - | 12VDC | - |
| DC Output Voltage Range | Typical Output Voltage | 11.4V | - | 12.6V |
| Load Current Range | | - | 4.0A | - |
| Peak Load Current | Time < 60ns | - | - | - |
| Ripple | Typical Input Voltage, Typical Load Current, +25°C | - | - | 200mV |
| Hold-Up Time | At Typical Input Voltage and Full Load | 10mS | - | - |
| Turn-On Delay | Typical Input Voltage and Typ Load Current | - | - | 1S |
| Overcurrent Protection | Auto Recovery | - | - | - |
| Short-Circuit Protection | The Adapter Shall Not be Damaged by Shorting the DC Output to GND | - | - | - |
| Overvoltage Protection | | - | - | - |

MECHANICAL:

| Item | Specification OR Test Condition | Acceptance Criteria |
|--------------|--|---|
| Bending Test | Normal Temperature The Cord Shall Withstand Weight of 200g, Swinging From Left to Right at an Angle of 60° 1000 Cycle Times Min. S/R Shall Withstand Weight of 1N, Swinging from Left to Right at an Angle of 60° 1000 Cycle Times Min. Bending Speed 40 Cycle/Minute | No Short Circuit No Breakage of the Cord |
| Vibration | Frequency Range: 10 to 55Hz Amplitude: 1.5mm Acceleration: 1G Sweep 1 Minute for X, Y, Z Axis Each | There Shall Be No Abnormality on the Appearance Structure and Operating |

RELIABILITY:

| Item | Test Condition | Acceptance Criteria |
|----------------------------------|--|--------------------------|
| Temperature Up with Typical Load | Test at Surface of the Case with Typical AC Input and Typical Load in Output 50/60Hz | Temperature Up Under 35° |
| Hi-Pot Test | Input to Output Gradually Raised from 0 to the 3000VAC and Held at that value for 3S, 5mA | No Damage |
| Insulation Resistance | Input to Output, DC 500V | > 10MΩ |
| MTBF | Typical Input & Full Load, +25°C | 50000 Hours |
| Burn-In | At +30°C (±10°C), Normal Input Voltage | 2 – 4 Hours |

ENVIRONMENT:

| Item | Specification or Test Conditions | Min | Typ | Max |
|-----------------------|----------------------------------|-------|-----|--------|
| Operating Temperature | | 0°C | – | +40°C |
| Storage Temperature | | -20°C | – | +85°C |
| Operating Humidity | Non-Condensing | 5% RH | – | 90% RH |
| Storage Humidity | Non-Condensing | 5% RH | – | 90% RH |

