POWERMASTER

Wall Mount Switch Mode Power Supply Unit T0616-21J - 12J Series



FEATURES

Wall mounted light weight and compact Switch Mode Power Supply Units with a wide 90V-264V AC input voltage range to suit travel product applications. The narrow width allows two adaptors to be used in a standard double power outlet. Insulated active and neutral pins meet AS/NZS3112 for improved electrical safety. Electrical Safety Authority Approved. Other voltages and choice of output plug can be custom made upon request.

OUTPUT

| Output Voltage | 6Vdc |
|-------------------------|---|
| Maximum Load Current | 1.66A |
| Rated Output Power | 12W |
| Ripple and Noise* | 120mV p-p |
| Output overshoot | 10% of nominal voltage value |
| Turn-on Delay (Max) | 5 Seconds at nominal input AC voltage and full load |
| Hold-up Time (Min) | 10mS minimum at nominal input AC voltage and full load |
| Temperature coefficient | Output voltage temperature coefficient ±0.05%/°C |
| Rise Time | Start-up rise time of 10mS to rise to within regulation limits |
| Switching Efficiency | 70.68% minimum at normal input voltage and output current from 100%, 75%, 50% and 25% |

^{*} Voltage measured P-P at 20MHz and output parallel with 100nF ceramic and 10uF electrolytic capacitors to ground. Termpature at 25°C and nominal AC input voltage.

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/////////INPUT

| | MINIMUM | RATED | MAXIMUM |
|-------------------------|--|---------------|---------|
| Input Voltage | 90V AC | 100 – 240V AC | 264V AC |
| Input Frequency | 47 Hz | 50 / 60 Hz | 63 Hz |
| Input Current* | | | 350mA |
| At full load cold start | The inrush current will not exceed 60A, do not result any damage and the input fuse shall not be blown up. | | |

^{*} At 100-240V AC

POWER CONSUMPTION AT NO LOAD

| Input current | 350mA max at 100-240V AC |
|-----------------------------|--------------------------------|
| Power consumption (no load) | 0.5W max at input 230V AC/50Hz |

PROTECTION

| Over-current Protection* | > 1.76A and ≤ 4.5A at 100-240V AC 50/60Hz |
|--------------------------|--|
| Short-circuit Protection | The adaptor's input power shall decrease when the output is short circuiting, can withstand continually without damage. It shall be self-discovery to normal state when the fult condition is removed. |

ENVIRONMENTAL

| Cooling | Natural convection |
|-----------------------|--------------------------|
| Operating Temperature | 0°C to +40°C |
| Storage Temperature | -30°C to +70°C |
| Operating Humidity | 10 ~ 90 % Non-condensing |
| Storage Humidity | 10 ~ 90 % Non-condensing |

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MECHANICAL

| Dimensions | 11(L) x 5.5(W) x 2.1(D) mm |
|-----------------|---|
| Weight | 125g maximum |
| Input Plug Type | Wall type, SAA 2-pin AS/NZS3112 |
| Output Cord | 20AWG/2C, 3.5Q, 80°C, 300V, 1185, 1830mm, Lead free |
| Output Plug | DC Barrel Plug (with fork and groove) - 11x 5.5x2.1mm |
| Polarity | Centre positive |

RELIABILITY

| Mean Time Between Failure (MTBF) | The power supply is designed to have a MTBF of 50,000 hours. |
|-----------------------------------|--|
| wican finic between fanale (witb) | The power supply is designed to have a wild of 50,000 hours. |

SAFETY

| Insulation Resistance | $10 M\Omega$ at $500 V$ DC between Input to Output |
|---|--|
| Dielectric withstanding voltage test (Hi-pot test) input to ouput | AC3000V, 5mA 1 minute for type test |
| Leakage Current | Less than 0.25mA at maximum AC input voltage |
| Standard | AS/NZS 60950 |

ENERGY EFFICIENCY

| Compliance | AS/NZS CISPR22 |
|--------------------------------|-----------------------------------|
| International Efficiency Level | IV |
| Performance Requirements | MEPS: AS/NZS 4665.1 AS/NZS 4665.2 |