



POWER PLUG 24W

AC/DC POWER SUPPLY

REV. 01

POWER PLUG FEATURES

- PRIMARY SWITCHED WALL PLUG-IN power supply
- EUROPEAN INPUT VOLTAGE 230 V_{ac}
- 24W SINGLE OUTPUT
- EMC COMPLIANCE ACCORDING TO EU DIRECTIVES
- SAFETY APPROVAL ACCORDING TO EN60950 / EN60065
- CE MARKED
- OUTPUT VOLTAGE PRECISION: $\pm 5\%$
- INPUT FUSE PROTECTION
- OUTPUT SHORT CIRCUIT PROTECTION
- 2 WIRES DC CORD 1.5 m TERMINATED WITH 5.5 mm (ext. diam.) / 2.5 mm (int. diam.) JACK CONNECTOR
- AVAILABLE WITH EU, UK PLUGS
- LOW STAND-BY POWER CONSUMPTION



EURO PLUG



UK PLUG

| Plug Type | Ordering Number |
|-----------|-----------------|
| EURO | GSPP-1220STM/1 |
| UK | GSPP-1220STM/2 |

POWER PLUG 24W

POWER PLUG DESCRIPTION

The Power Plug is a high efficiency AC/DC switch mode constant voltage generator. Designed for a variety of residential applications, this wall plug-in power supply performs up to 24W output power.

Typical reference value for the off the shelf solution is 12V 2A.

Coming into a compact housing, the power plug can be assembled with EU or UK plug, identified by specific ordering numbers.

Output DC power is ensured via a 2 wires cord with strain relief, terminated with a barrel connector. Typical weight is 100 grams only, without cable.

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$, unless otherwise specified.)GSPP-1220STM/x

| Symbol | Parameter | Test Condition | Min. | Typ. | Max. | Unit |
|-----------------|-----------------------------------|--|------|------|------|--------------------|
| V_i | Input Voltage | | 187 | | 264 | V_{RMS} |
| I_o | Output Current | $T_{ambient} = 40^{\circ}\text{C}$, $V_i = 187 \div 264 V_{ac}$ | | | 2 | A |
| V_o | Output Voltage | $V_i = 187 \div 264 V_{ac}$, $I_o = 0 \div I_{max}$ | 11.4 | 12 | 12.6 | V |
| V_{or} | Output Ripple | $I_o = I_{max}$ | | | 200 | mVpp |
| I_{osc} | Output short circuit current | Hiccup mode | | | 2.5 | A |
| n | Efficiency | $P_O = 24W$ | | 85 | | % |
| $P_{stand\ by}$ | Power losses in no load condition | $V_i = 230 V_{RMS}$, $I_o = 0 \text{ mA}$ | | | 750 | mW |
| V_{is} | Isolation voltage | Input to output | 3000 | | | V_{RMS} |
| T_{op} | Operating Ambient Temperature | | 0 | | 40 | $^{\circ}\text{C}$ |
| T_{stg} | Storage Temperature Range | | -20 | | 70 | $^{\circ}\text{C}$ |

AGENCY APPROVALS

The Power Plug is certified by competent agencies to comply with most popular safety and EMC requirements, including but not limited to:

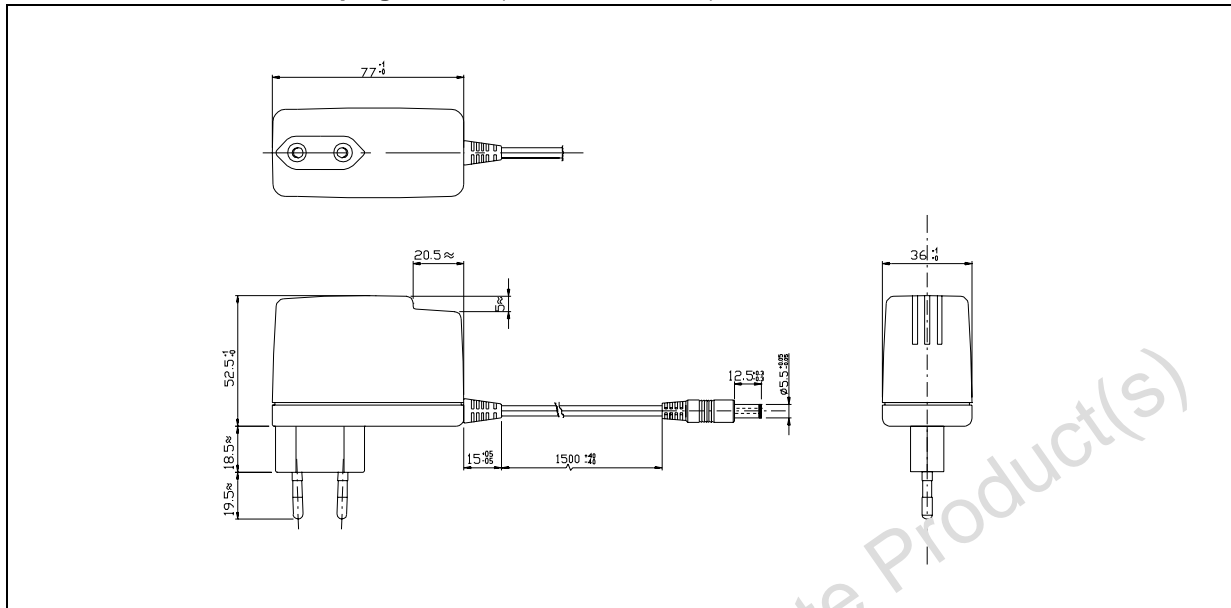
EN60950

ETS300-342-1

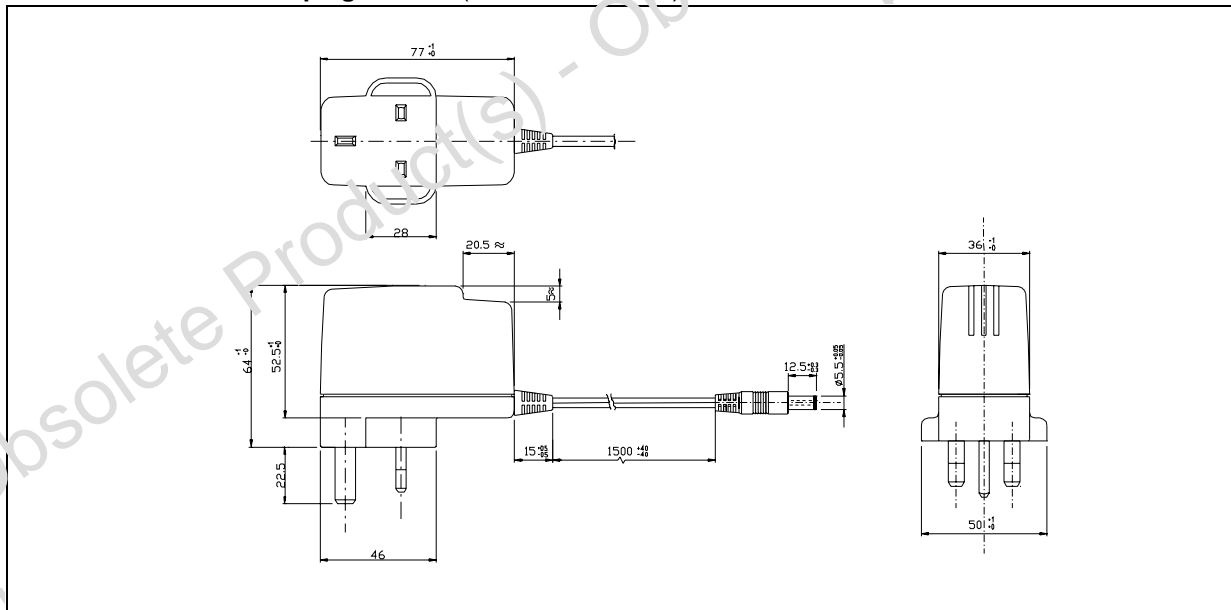
EN60065

EN55022 Cl B

MECHANICAL DATA EURO plug version (dimensions in mm)



MECHANICAL DATA UK plug version (dimensions in mm)



Information furnished is believed to be accurate and reliable. However, STMicroelectronics assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of STMicroelectronics. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information previously supplied. STMicroelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of STMicroelectronics.

The ST logo is a registered trademark of STMicroelectronics.
All other names are the property of their respective owners

© 2003 STMicroelectronics - All Rights Reserved

STMicroelectronics GROUP OF COMPANIES

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan -
Malaysia - Malta - Morocco - Singapore - Spain - Sweden - Switzerland - United Kingdom - U.S.A.

<http://www.st.com>