



# CHARLIE

## CIGAR LIGHTER ADAPTER

PRELIMINARY data

### FEATURES

- IN CAR BATTERY CHARGER FOR MOBILE PHONES
- UNIVERSAL TIP COMPATIBLE WITH ANY TYPE OF CIGAR CAR RECEPTACLES
- LINE INPUT 10.8-16 VDC
- SINGLE OUTPUT MAX 8W
- EMC COMPLIANCE ACCORDING TO ETS300-342-1
- COMPLIANT WITH UL2089 EMC REQUIREMENTS
- CE AND "EirI" MARKING. UL MARKING UPON REQUEST
- OUTPUT CURRENT AND VOLTAGE LEVELS ACCORDING TO CUSTOMER REQUIREMENTS
- OUTPUT VOLTAGE PRECISION: +/- 5%
- OUTPUT CURRENT PRECISION : +/- 8%
- OUTPUT RIPPLE VOLTAGE <100 mVpp
- INPUT FUSE PROTECTION
- OUTPUT SHORT CIRCUIT PROTECTION
- RG11 OUTPUT CONNECTOR. 2 WIRES COILED DC CORD WITH STRAIN RELIEF, TERMINATED WITH ANY CUSTOM CONNECTOR UPON REQUEST.
- OPTIONAL LED (GREEN OR RED) TO ACKNOWLEDGE DC POWER CONNECTION

### PRODUCT VIEW



(CHARLIE Housing)

ORDERING NUMBER: GSCC3-xyyCCC

xx = Output Voltage level (2 Digits)  
yy = Output Current level (2 Digits)  
CCC= Customer Identifier (3 Digits)

- EFFICIENCY TYPICALLY >75%
- LOW STAND BY POWER
- WEIGHT: 20 GRAMS WITHOUT OUTPUT DC CORD

### DESCRIPTION

The Cigar Lighter Adapter CHARLIE has been designed for charging NiMH and NiCd batteries in hand held mobile phones. CHARLIE is a cost effective high efficiency DC/DC switching mode constant current generator. At low current, the charger behaves like a constant voltage generator. The output voltage and current levels are set up by design in accordance with customer requirements.

## CHARLIE

Typical reference values in this data sheet are 8V, 700 mA. Line input variation in the range 10.8-16 Vdc.

Coming into the ST original "Charlie" housing, CHARLIE CLA has been designed to fit most popular car cigar lighter receptacles thanks to its very peculiar tip shape and architecture.

Upon request, for high volume market, a custom tailored housing can be designed, sharing the same peculiar Charlie tip.

Optionally, an LED (green or red) can be assembled to acknowledge input DC power connection.

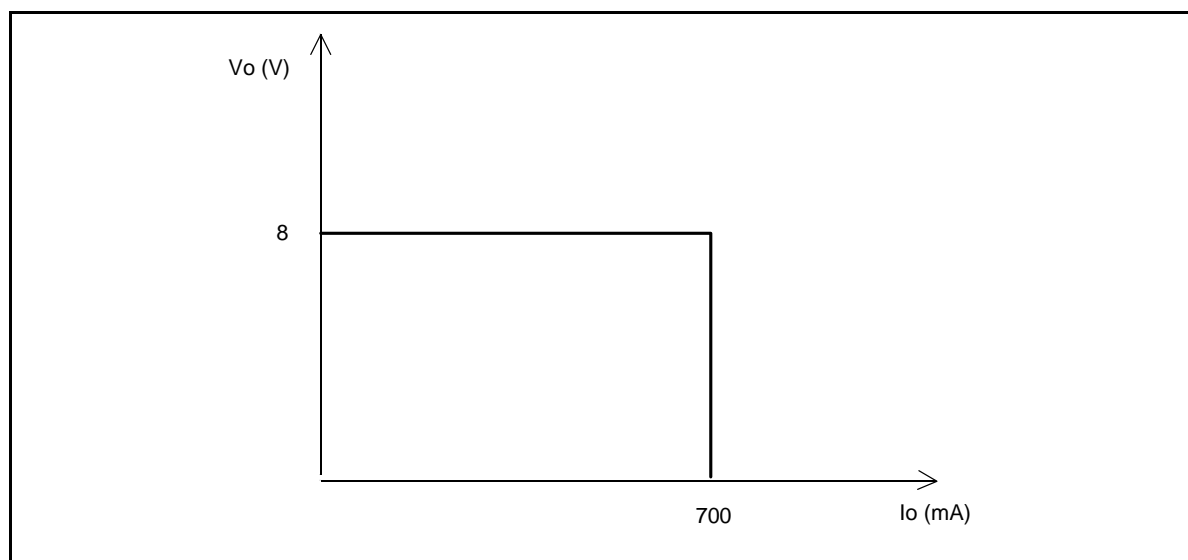
### AGENCY Approvals

The charger is certified by competent agencies to comply with European EMC requirements, including but not limited to ETS300-342-1, UL2089 and the automotive Eurl. CHARLIE is marked CE and Eurl.

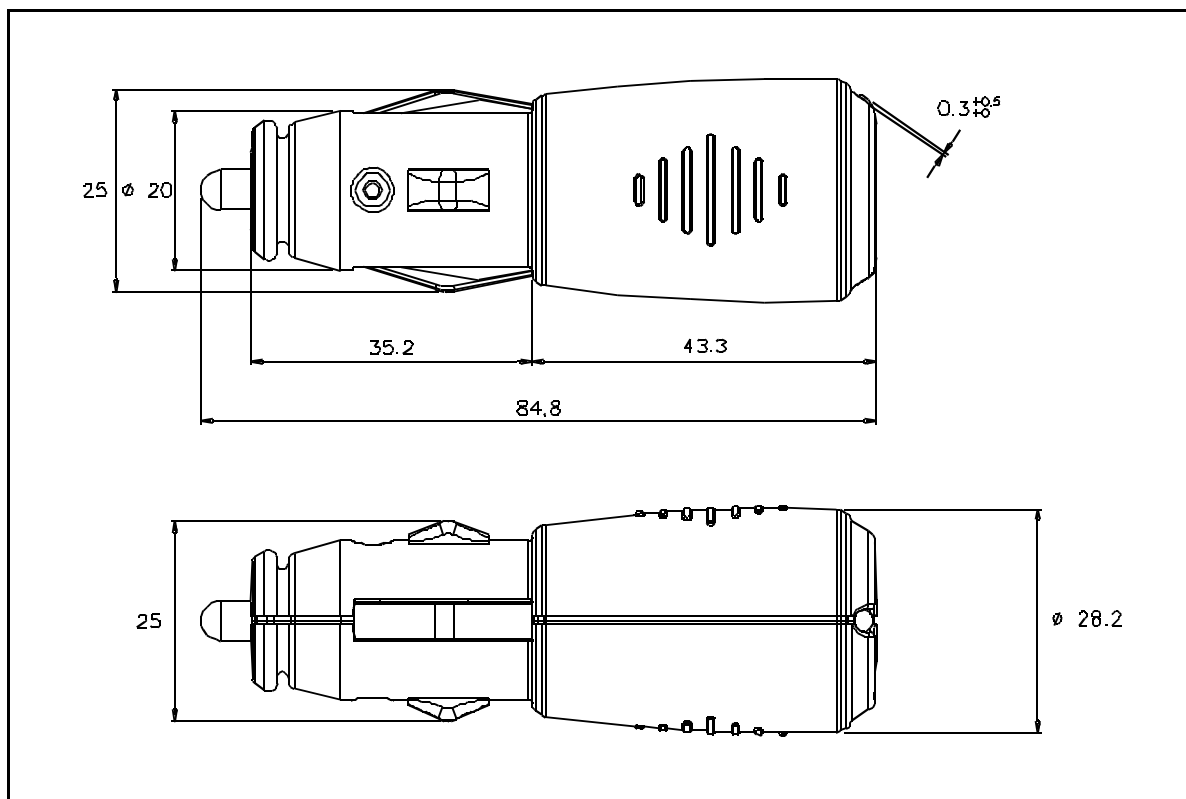
### ELECTRICAL CHARACTERISTICS (Tamb=25°C, unless otherwise specified.)

| Symbol | Parameter                     | Test Condition | Min. | Typ. | Max. | Unit |
|--------|-------------------------------|----------------|------|------|------|------|
| Vi     | Input Voltage                 |                | 10.8 |      | 16   | Vdc  |
| Vo     | Output Voltage limit          | No load        | 7.6  | 8.0  | 8.4  | V    |
| Io     | Output Current limit          |                | 650  | 700  | 750  | mA   |
| Vor    | Output Ripple                 | Vbatt=6V       |      |      | 100  | mVpp |
| Top    | Operating Ambient Temperature |                | -10  |      | +55  | °C   |
| Tstg   | Storage Temperature Range     |                | -20  |      | +85  | °C   |
| n      | efficiency                    |                |      | 75%  |      |      |

### TYPICAL OUTPUT CHARACTERISTIC



## MECHANICAL DATA (dimensions in mm)



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