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 "Eirl" 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-xxyyCCC

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.

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.

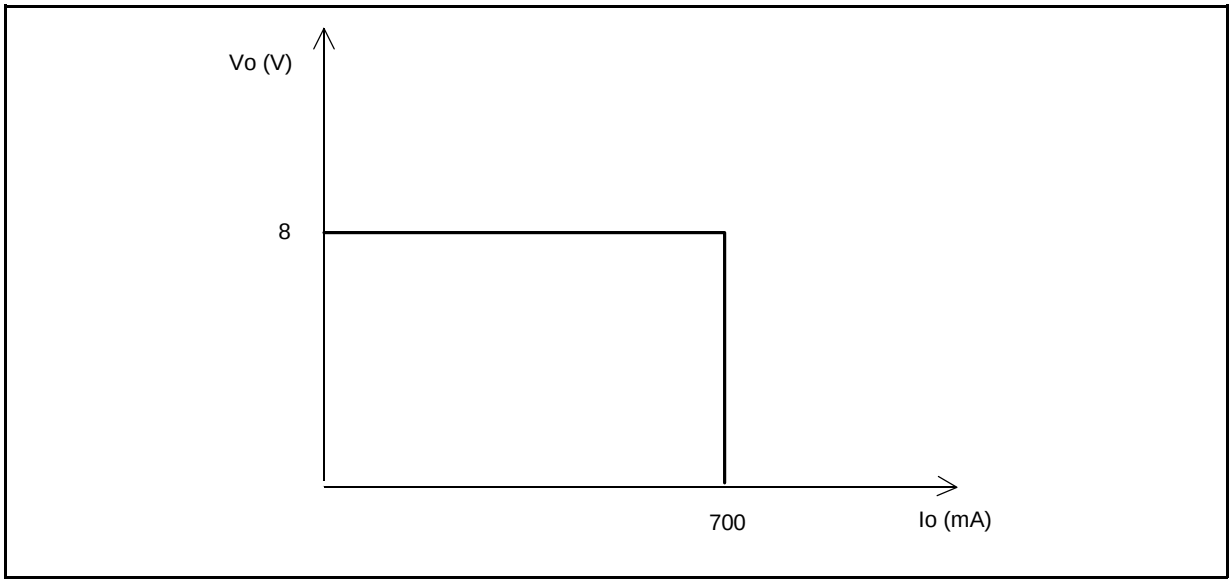
AGENCY Approvals

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 Eirl. CHARLIE is marked CE and Eirl.

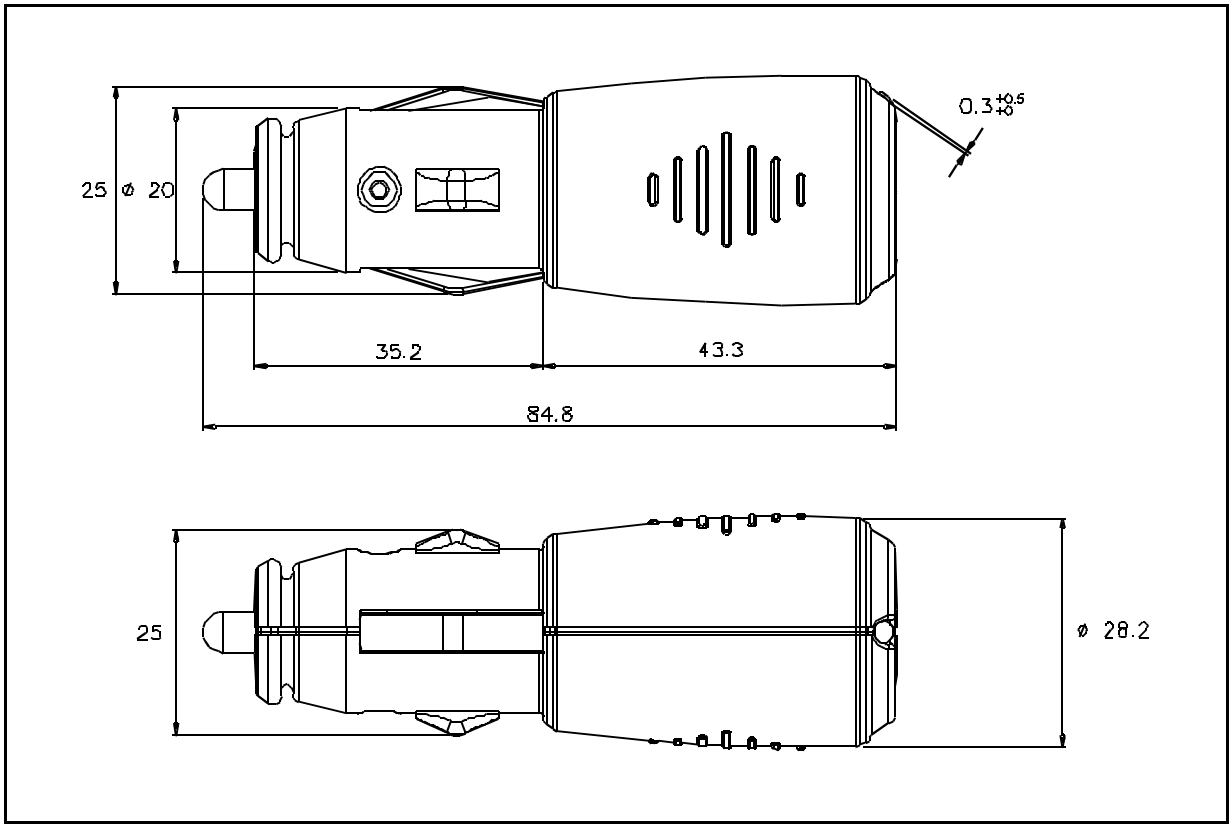
ELECTRICAL CHARACTERISTICS (Tamb=25^{o}C, unless otherwise specified.)

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 Temperaure		-10		+55	^{o}C
Tstg	Storage Temperature Range		-20		+85	^{o}C
n	efficiency			75%		

TYPICAL OUTPUT CHARACTERISTIC



MECHANICAL DATA (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. Specification 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

© 2000 STMicroelectronics – Printed in Italy – All Rights Reserved

STMicroelectronics GROUP OF COMPANIES

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

http://www.st.com