

# Technical Data Sheet

## CAR15A Car/Truck Power Adapter



### 15 Watt automobile power adapter

#### Features:

- Wide input voltage range
- Max. output power 15 Watt
- Car/Truck input connector

#### Applications

- Suitable for use with PDA's, GSM & GPRS navigation systems, handheld devices (e.g. payment terminals) etc.

### Specification

#### Input

Voltage range	9 - 32VDC
Standby current	Typical 62mA @ 9V input Typical 36mA @ 32V input
Input fuse	3.15A
Protection	Reverse polarity (input fuse)

#### Output

Voltage range	10 - 15V
Power	15W cont.
Initial set tolerance	±3% max.
Load regulation <sup>(1)</sup>	-4% max.
Line regulation	±1% max.
Ripple & Noise <sup>(2)</sup>	< 90mVpk-pk
Current Limit	Constant Current
Protection	Short circuit Over temperature protection

#### Environmental

Cooling	Convection cooled
Temperature	Operating: -20°C to 40°C Non-operating: -40°C to 85°C
Pressure & altitude	Operating: 1200hPa to 570hPa, max. 4600m above sea level Non-operating: 1200hPa to 115hPa, max. 15000m above sea level
Humidity	5 to 95% r.H., non-condensing

#### General

Input connector	Cigarette lighter adapter
Output connector	Customer-specific
Efficiency <sup>(3)</sup>	typical 85% at 100% load
MTBF	>20000h @ 25°C ambient temperature and G <sub>B</sub> per MIL-HDBK217F
Green procurement	WEEE RoHS
Indicator	Single green LED
Ingress protection rating	IEC60529, IP40

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Safety & EMC		
Regulatory approvals	Europe	CE
Electromagnetic emissions	Europe	EN55022 class B
	USA	FCC15 class B
	Australia	RCM
Electromagnetic Immunity	ESD immunity	IEC61000-4-2, 4kV contact, 8kV air
	Electromagnetic field immunity	IEC61000-4-3, 80-1000MHz, 10V/m, modulation 80%/200Hz
	Electrical fast transient/burst immunity test	IEC61000-4-4, +/-1kV, 5/50ns
	Surge immunity test	IEC61000-4-5, +/-1kV, 1.2/50(8/20) $\mu$ s
	Conducted Immunity	IEC61000-4-6, 0.15-230MHz, 10V, 80%, 1kHz, AM
UNECE vehicle regulation	E13 ECE Reg. 10	

- other approvals on request

Mechanical Details	
Housing dimensions (LxWxH)	61 x 41 x 29mm, without cables and connectors
Input cable length	100cm $\pm$ 5%
Output cable length	100cm $\pm$ 5%
Weight	44g, without cables and connectors

### Notes

1. Load regulation is measured at the output connector and includes the voltage drop across the output cable.
2. Measured with a 0.1 $\mu$ F ceramic and a 10 $\mu$ F electrolytic capacitors across the output terminals. The oscilloscope bandwidth is set at 20MHz a co-axial cable will be used to measure it. The test condition is maximum load.
3. Power losses of input and output cables are not considered here.

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