

## CAR90A

Car Adapter DC/DC



### Features:

- Wide input voltage range
- Ultra-compact and lightweight car adapter
- 90.00W continuous output power
- Worldwide approvals
- High safety standards (e.g. protection against short circuit, over current, over voltage, over temperature)
- For use in cars and trucks

### Applications:

Suitable for portable mobile devices

## Specification

| Input                     |   |  |
|---------------------------|---|--|
| Voltage range             | 11.00 – 32.00VDC  |  |
| Switch off voltage        | 10.00VDC  |  |
| Stand-by current          | Typical 40.00mA @ 11.00V input<br>Typical 80.00mA @ 32.00V input  |  |
| Input fuse                | 12.00A (in CLP)   |  |
| Protection                | Reverse polarity (input fuse CLP)<br>Under voltage protection<br>Over temperature protection (latch-off reset)  |  |
| Output                    |   |  |
| Voltage range             | 5.00 – 24.00V nominal   |  |
| Power                     | 90.00W cont.  |  |
| Initial set tolerance     | ±3% max.  |  |
| Load regulation           | -80mV max. / A  |  |
| Line regulation           | ±1% max.  |  |
| Ripple & Noise            | < 200.00mV <sub>pk-pk</sub>   |  |
| Current limit             | Constant current, 6.00A max.  |  |
| Protection                | Short circuit, over current protection (current limitation), over voltage protection (latch-off reset), over temperature protection (latch-off reset) |  |
| Environmental             |   |  |
|                           | Operation:  | Storage:   |
| Ambient Temperature       | -20°C to 40°C   | -40°C to 85°C  |
| Pressure & Altitude       | 1200hPa to 795hPa<br>max. 2000m above sea level   | 1200hPa to 115hPa<br>max. 1500m above sea level  |
| Humidity (non-condensing) | 5% to 95% r.H.  | 5% to 95% r.H.   |
| General                   |   |  |
| Input connector           | Cigarette lighter adapter (CLP)   |  |
| Output connector          | Customer-specific   |  |
| Efficiency                | Typical 96% at 100% load  |  |
| MTBF                      | > 20000h @ 25°C ambient temperature and G <sub>B</sub> per MIL HDBK217F   |  |
| Green procurement         | RoHS 2011/65/EU + 2015/863/EU<br>REACH 1907/2006<br>WEEE 2012/19/EU   |  |
| Indicator green LED       | On: Power on<br>Flashing: Failure<br>Off: Power off   |  |
| Ingress protection rating | IEC60529, IP40  |  |
| Cooling                   | Convection cooled   |  |
| Safety & EMC              |   |  |
| Regulatory approvals      | Europe<br>United Kingdom<br>International<br>USA/Canada<br>Australia  | CE<br>UKCA<br>CB Report IEC60950-1<br>cULus UL60950-1<br>RCM   |
| Electromagnetic Emissions | Europe<br>USA   | EN55022 class B, EN55024<br>FCC15 class B  |
| Electromagnetic Immunity  | ESD immunity<br>Electromagnetic field immunity<br><br>Electrical fast transient/burst immunity test<br>ISO-Impulses                                   | IEC61000-4-2, 4kV contact/ 8kV air<br>IEC61000-4-3, 80-2700MHz, 3 V/m, AM 80%/1kHz<br>IEC61000-4-4, +/-1kV, 5/50ns<br><br>ISO7637-2, pulses 1, 2a, 2b, 3a, 3b, 4 |

**- other approvals on request**

## Mechanical Details

|                            |   |
|----------------------------|---|
| Housing dimensions (LxWxH) | 115.00 x 53.70 x 21.50mm, without cables and connectors |
| Input cable length         | 100cm ±5%   |
| Output cable length        | 100cm ±5%   |
| Weight                     | 250g, without cables and connectors                     |

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