

CCM03 SERIES

Smart Card Connector

Incorporating experience and expertise gained from M2M, C&K introduces new versions of the CCM03 family, which are designed to withstand the most extreme conditions and to accommodate specific manufacturing processes.

CCM03-3001 with inlay contacts for application in hot and humid environment (example - outdoor smart meters).

CCM03-3511 with an increased contact force to withstand shock and high vibration (example - tracking devices).

CCM03-3512 with extended soldering pads to withstand a second reflow upside down.

C&K's CCM03 series smart card connector offers a built-in card detection switch for machine-to-machine applications. The harsh environment connectors meet IEC 512 certification and are resistant to shock, vibration, humidity and extreme temperatures. The CCM03 connectors deliver an advanced contact system that optimizes electrical performance, flexibility and reliability, while minimizing the electrical contact resistance and overall cost.



- Transport & Automotive
- Energy
- Point-of-Sale
- Security
- Medical
- Consumer
- Vending Machine Monitoring

CCM03
Your secure
connection
from market to
application



- Asset
- Monitoring
- Supply Chain
- Location
- Automation
- Diagnostics
- Enterprise
- Middleware
- Infrastructure
- LAN / WAN
- Wireless
- RFID

CCM03

Mechanical

- Number of contacts 6
- Mechanical life, hinged cover 10,000 cycles min
- Card insertion force Hinged cover 1N max
- Card extraction force Hinged cover 1N max
- Contact force 0,25N min / 0,50N max
- High force option 0,35N to 0,65N
- Slide locking force 2N min / 6N max
1,8N max. for complete depression
- Vibration frequency 10 to 500 Hz. Acceleration 50m/s²
Duration 6 hours – amplitude 0,35 mm
- Max electrical discontinuity 1 μ s
- Shock peak value 500 m/s² – Duration 11 ms
3 shocks in each direction of each axis

Switch Electrical Data

- Card detection switch Normally open
- Contact resistance 100 mW max
- Dielectric strength 250 Vrms min
- Current rating 1 mA min / 10m A max
- Maximum power 0.2 VA

Environment Data

- Operating temperature -40°C to +85°C
- Damp heat IEC 512 test number 11c (10 days)
- Salt mist RoHS compliant IEC 512 test number 11f (96 hours)

Soldering Process

- Compatible with lead free SMT soldering process

Contact Electrical Data

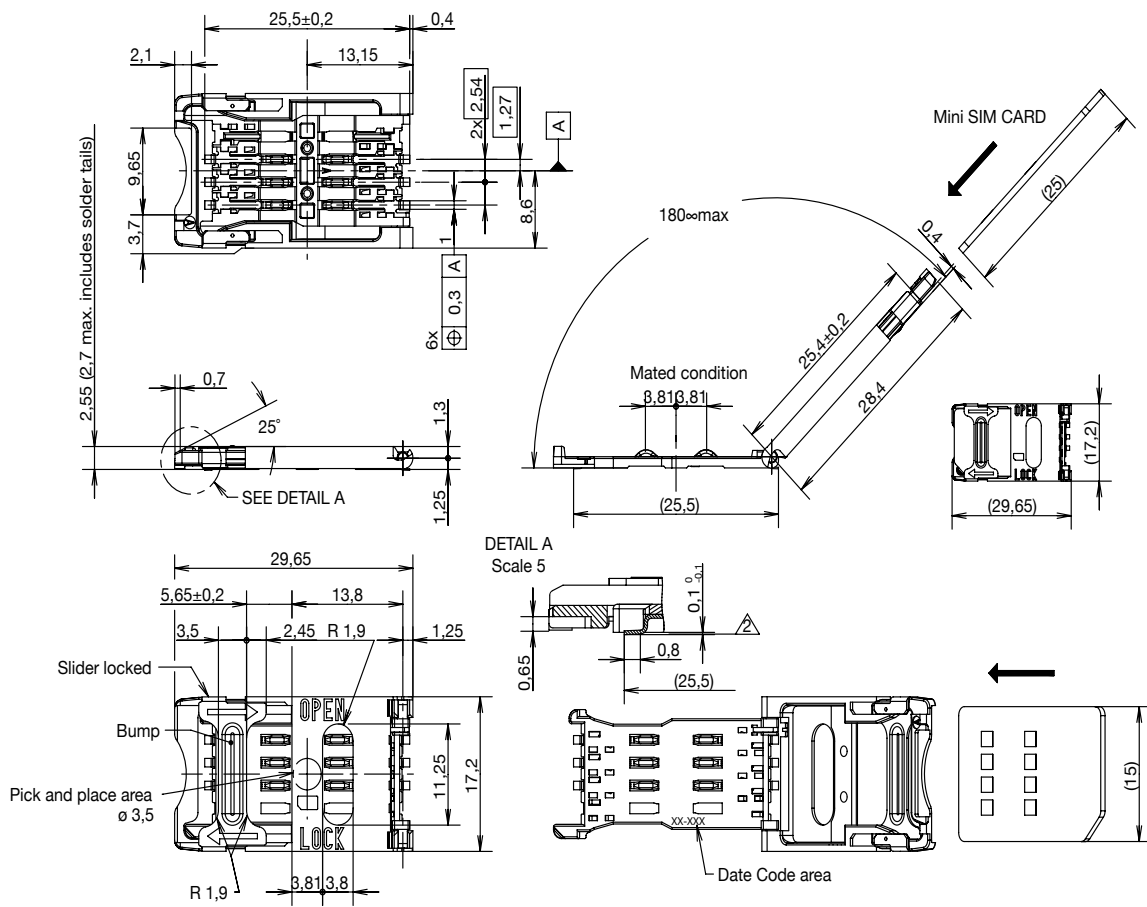
- Insulation resistance 1,000 MW min
- Resistance 100 mW max
- Current rating 10 μ A min / 1 A max
- Dielectric strength 750 Vrms min

CCM03

CCM03-3009 LFT

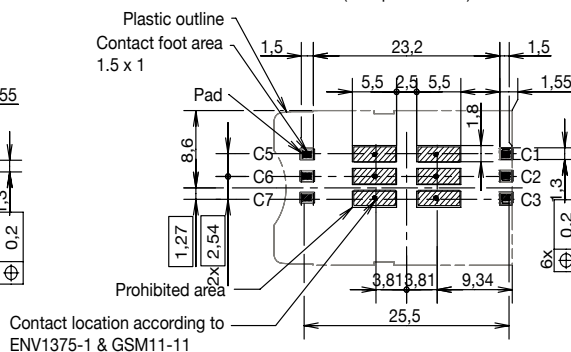
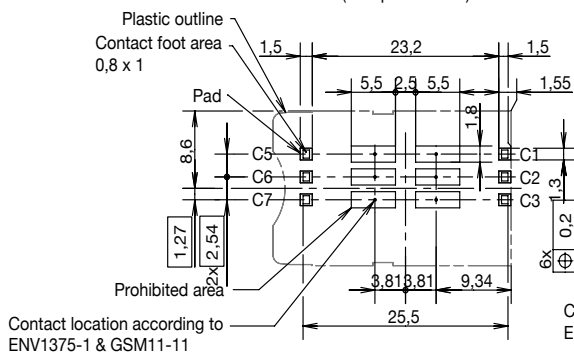
Contact Plating	Cover	# of Contacts	Card Presence Switch	Operating Life	Total Height (mm)	Dimension (mm)	Packaging
Cold	Hinged	6	Without	10 000	2,55	17,2 x 29,65	Reels of 1,000 pcs

Inlay contacts, high forces, long soldering pads available on demand



RECOMMENDED PC BOARD LAYOUT
(Component side)

RECOMMENDED PC BOARD LAYOUT
(Component side)



Long soldering pads option

CCM03

CCM03-3013 LFT

Contact Plating	Cover	# of Contacts	Card Presence Switch	Operating Life	Total Height (mm)	Dimension (mm)	Packaging
Cold	Hinged	6	With	10 000	2,55	17,2 x 29,65	Reels of 1,000 pcs

Inlay contacts, high forces, long soldering pads available on demand

