

CCM03 MK2 Series



Features

- SIM/SAM card acceptance
- Hinged and fixed covers
- Compatible with pick and place and lead free soldering

Typical Applications

- Handheld products
- Identification
- POS
- Automotive

Mechanical

| | |
|-------------------------------|---|
| Number of Contacts | 6 or 8 |
| Mechanical life, hinged cover | 10,000 cycles min |
| Mechanical life, fixed cover | 50,000 cycles |
| Card insertion force | Hinged cover: 1N max Fixed cover: 3N max |
| Card extraction force | Hinged cover: 1N max Fixed cover: 0,80N min / 3N max |
| Contact force | 0,25N min / 0,50N max |
| Slide locking force | 2N min / 6N max 1,8N max. for complete depression |
| Vibration Frequency | 10 to 500 Hz. Acceleration 50m/s ² Duration 6 hours - amplitude 0,35 mm |
| Max electrical discontinuity | 1µs |
| Shock | Peak value 500 m/s ² – Duration 11 ms 3 shocks in each direction of each axis |

Switch Electrical Data

| | |
|-----------------------|----------------------|
| Card detection switch | Normally open |
| Contact resistance | 100 mΩ 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 | IEC 512 test number 11f (96 hours) |
| RoHS compliant | |

Soldering Process

Compatible with lead free SMT soldering process



Contact Electrical Data

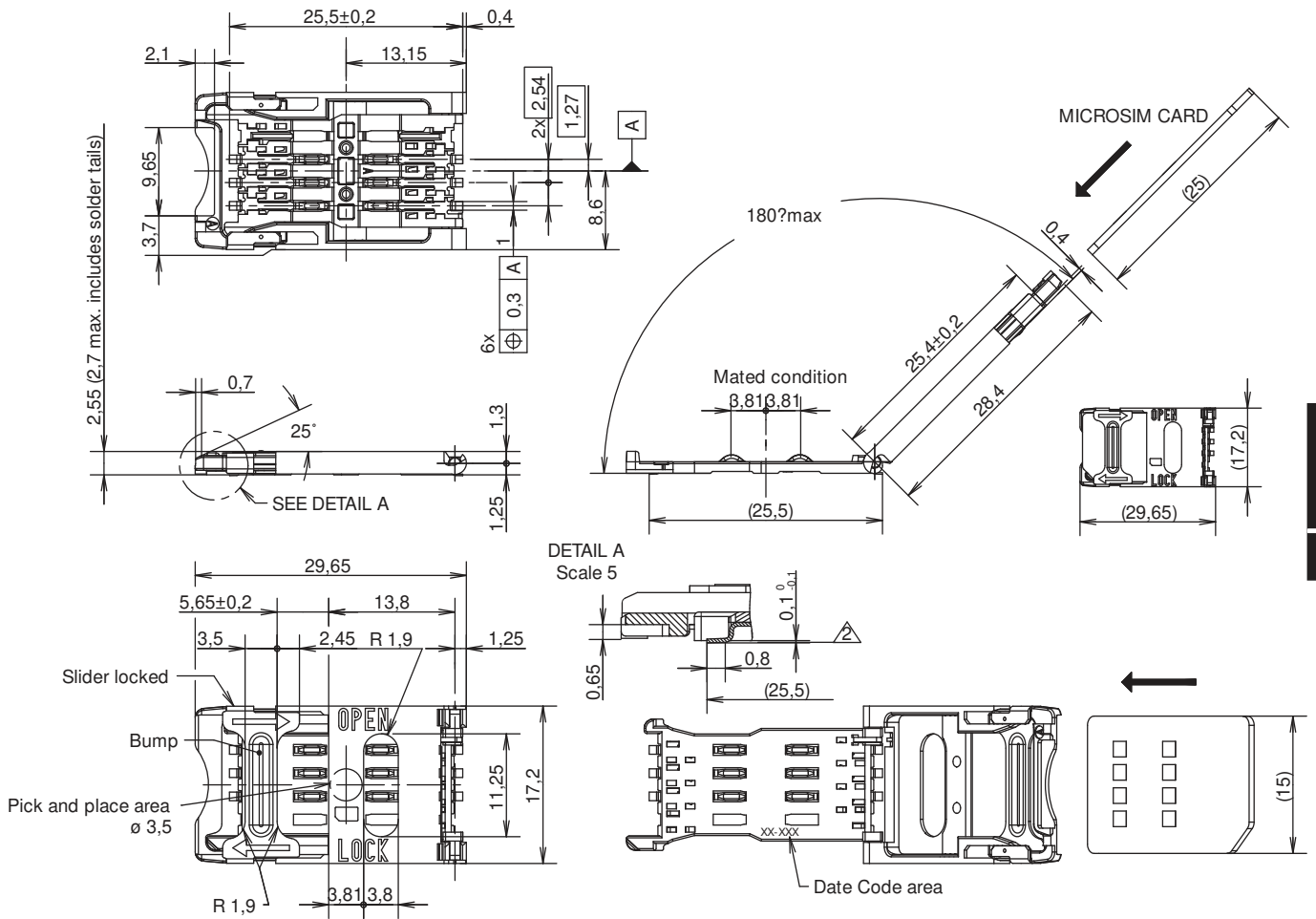
| | |
|-----------------------|---------------------|
| Insulation resistance | 1,000 MΩ min |
| Resistance | 100 mΩ max |
| Current rating | 10 µA min / 1 A max |
| Dielectric strength | 750 Vrms min |

| Designation | Contact Plating | Cover | # of Contacts | PCB Version | Card Presence Switch | Operating Life | Total Height (mm) | Dim. (mm) | Packaging |
|---------------|-----------------|--------|---------------|-----------------------|----------------------|----------------|-------------------|--------------|--------------------|
| CCM03-3001LFT | inlay | hinged | 6 | | without | 10,000 | 2,55 | 17,2 x 29,65 | reels of 1,000 pcs |
| CCM03-3002LFT | inlay | hinged | 6 | 2 plastic pegs | without | 10,000 | 2,55 | 17,2 x 29,65 | reels of 1,000 pcs |
| CCM03-3003LFT | inlay | hinged | 8 | | without | 10,000 | 2,55 | 17,2 x 29,65 | reels of 1,000 pcs |
| CCM03-3004LFT | inlay | hinged | 8 | 2 plastic pegs | without | 10,000 | 2,55 | 17,2 x 29,65 | reels of 1,000 pcs |
| CCM03-3009LFT | gold | hinged | 6 | | without | 10,000 | 2,55 | 17,2 x 29,65 | reels of 1,000 pcs |
| CCM03-3010LFT | gold | hinged | 6 | 2 plastic pegs | without | 10,000 | 2,55 | 17,2 x 29,65 | reels of 1,000 pcs |
| CCM03-3011LFT | gold | hinged | 8 | | without | 10,000 | 2,55 | 17,2 x 29,65 | reels of 1,000 pcs |
| CCM03-3012LFT | gold | hinged | 8 | 2 plastic pegs | without | 10,000 | 2,55 | 17,2 x 29,65 | reels of 1,000 pcs |
| CCM03-3013LFT | gold | hinged | 6 | | with | 10,000 | 2,55 | 17,2 x 29,65 | reels of 1,000 pcs |
| CCM03-3512LFT | gold | hinged | 6 | Large soldering pads* | without | 10,000 | 2,55 | 17,2 x 29,65 | reels of 1,000 pcs |
| CCM03-3504LFT | gold | fixed | 8 | | without | 50,000 | 2,85 | 17,2 x 25,5 | reels of 1,000 pcs |
| CCM03-3505LFT | gold | fixed | 6 | | without | 50,000 | 2,85 | 17,2 x 25,5 | reels of 1,000 pcs |
| CCM03-3754LFT | inlay | fixed | 6 | | with | 10,000 | 3,5 | 16,5 x 18,05 | reels of 1,000 pcs |
| CCM03-3760LFT | inlay | fixed | 6 | | without | 10,000 | 3,45 | 16,5 x 15,85 | reels of 1,000 pcs |
| CCM03-3764LFT | inlay | none | 6 | | with | 10,000 | 2,9 | 16,5 x 15,85 | reels of 1,000 pcs |

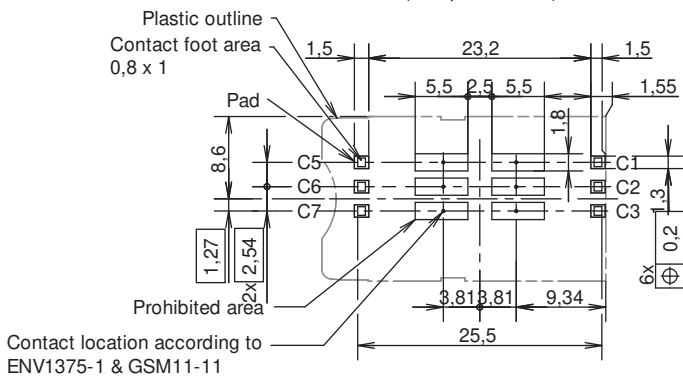
* Can go through reflow upside down

CCM03 MK2 Series

CCM03-3001 LFT / CCM03-3009 LFT



RECOMMENDED PC BOARD LAYOUT
(Component side)



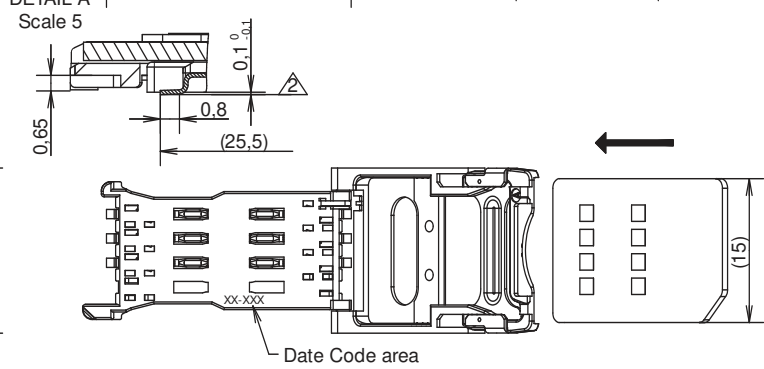
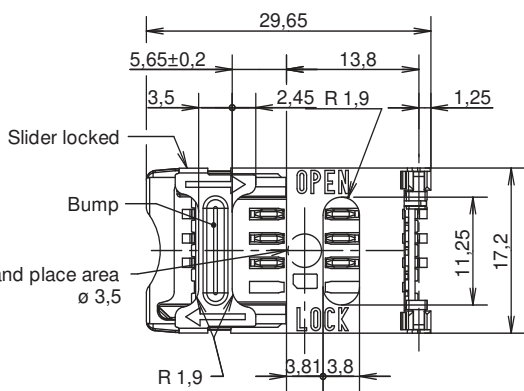
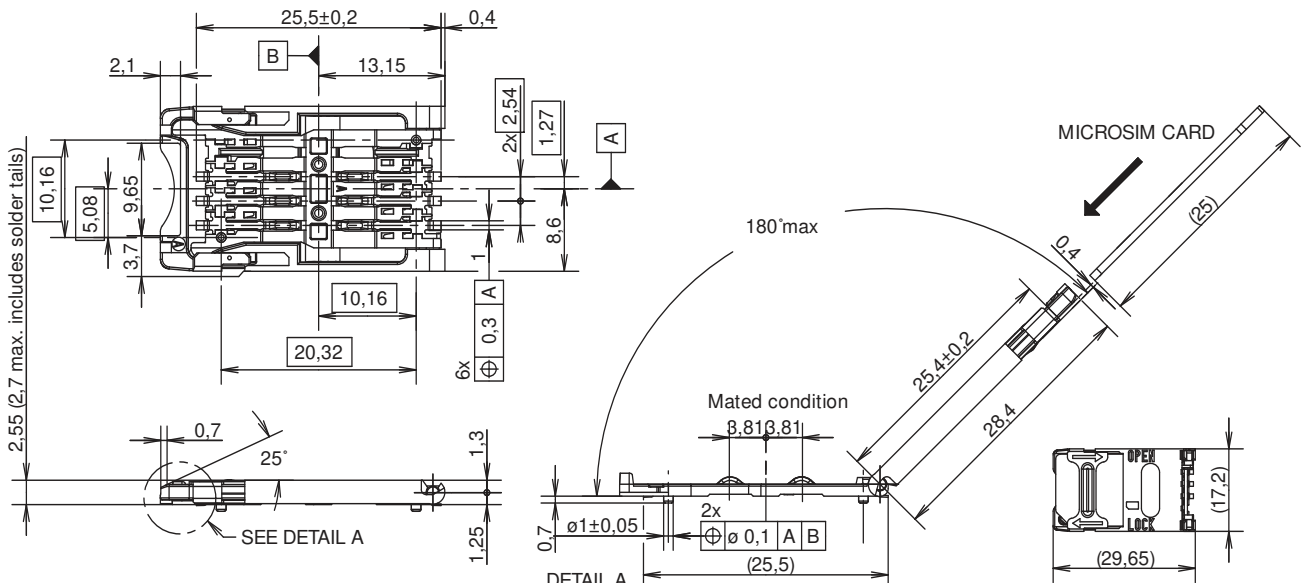
Dimensions are shown in mm
Specifications and dimensions subject to change

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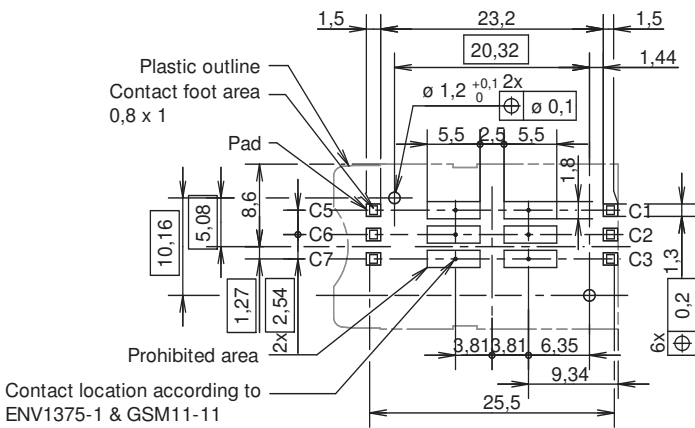
CCM03 MK2 Series

CCM03-3002 LFT / CCM03-3010 LFT

SIM/SAM



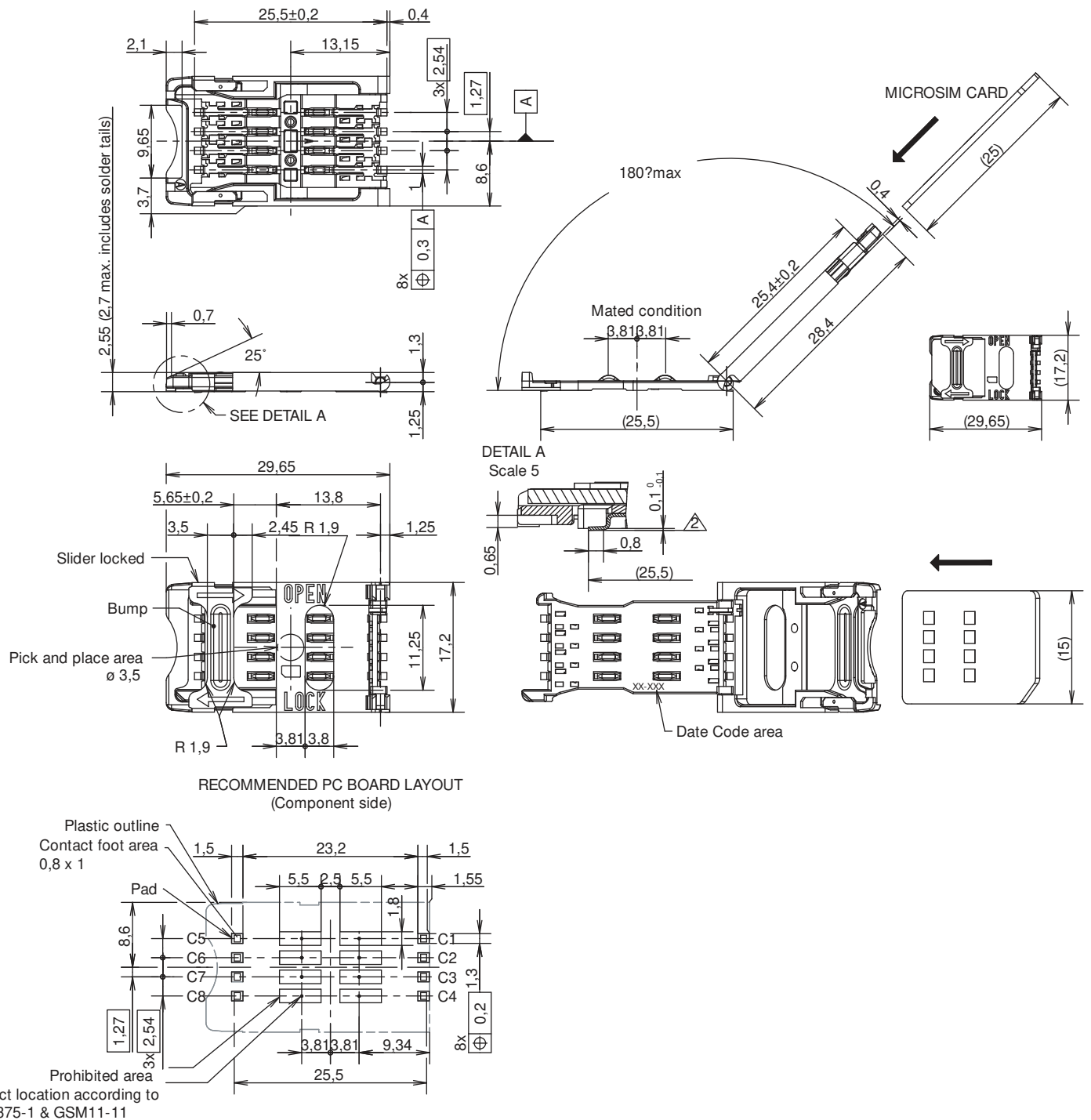
RECOMMENDED PC BOARD LAYOUT
(Component side)



Dimensions are shown in mm
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CCM03 MK2 Series

CCM03-3003 LFT



SIM / SAM



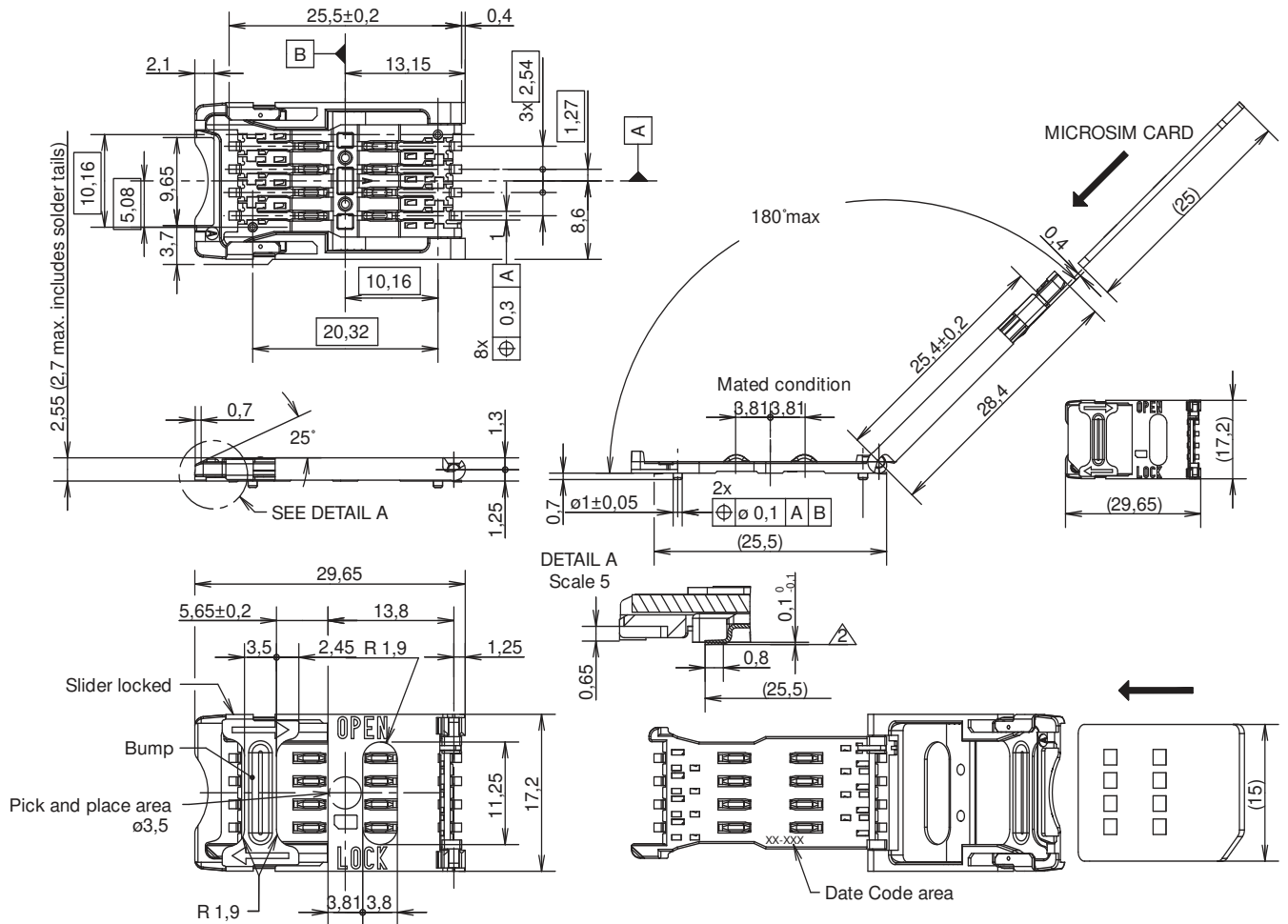
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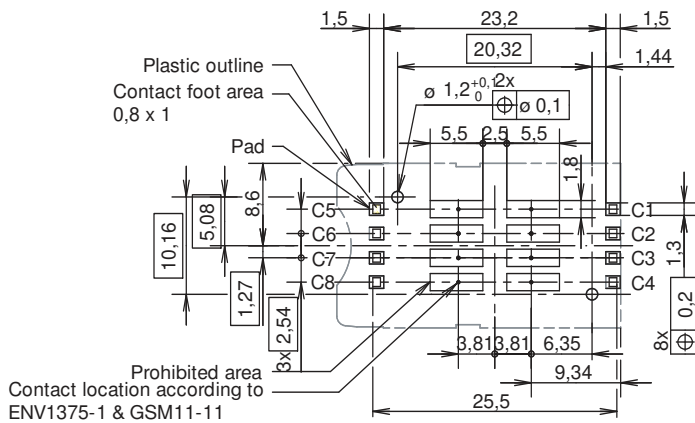
CCM03 MK2 Series

CCM03-3004 LFT

SIM/SAM

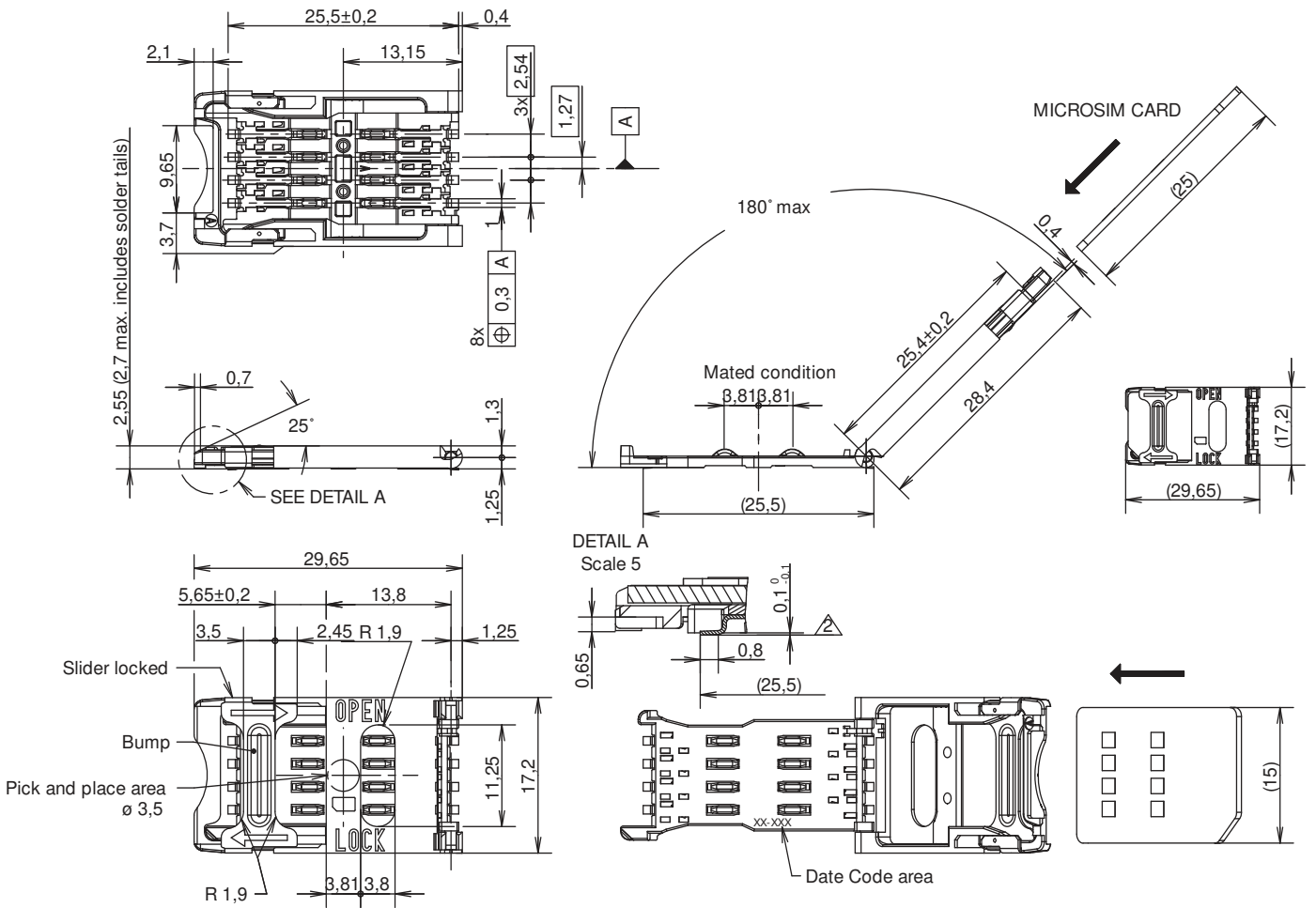


RECOMMENDED PC BOARD LAYOUT
(Component side)

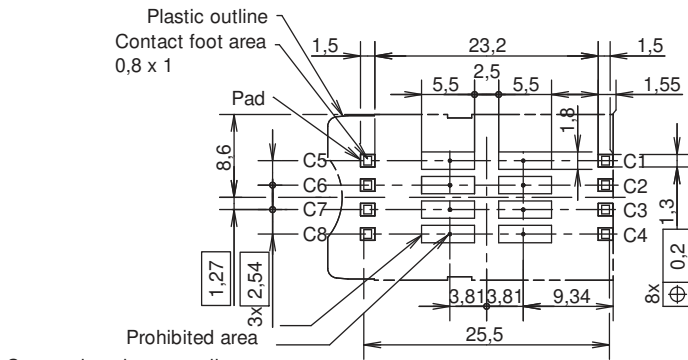


CCM03 MK2 Series

CCM03-3011 LFT



RECOMMENDED PC BOARD LAYOUT (Component side)



SIM / SAM



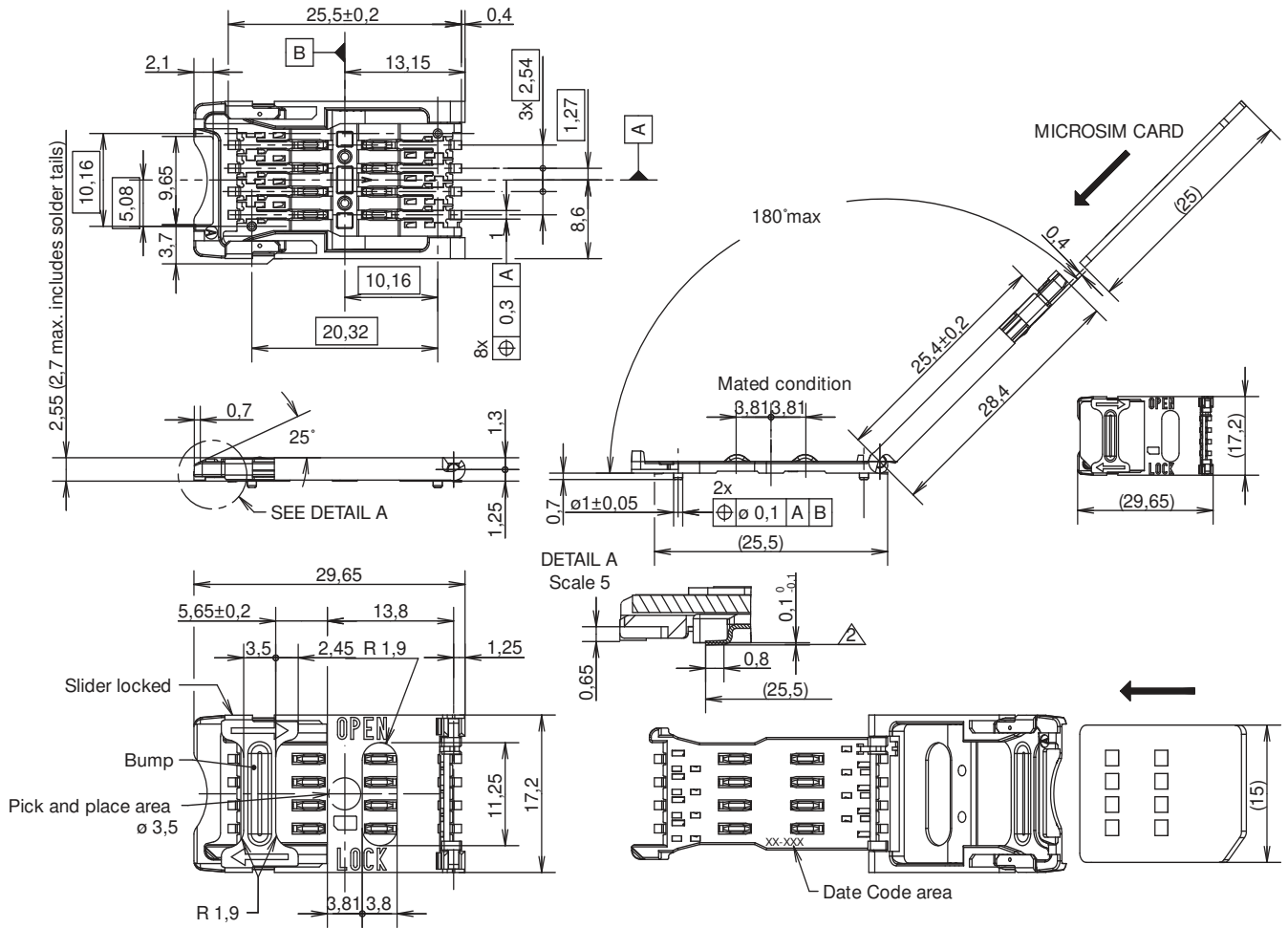
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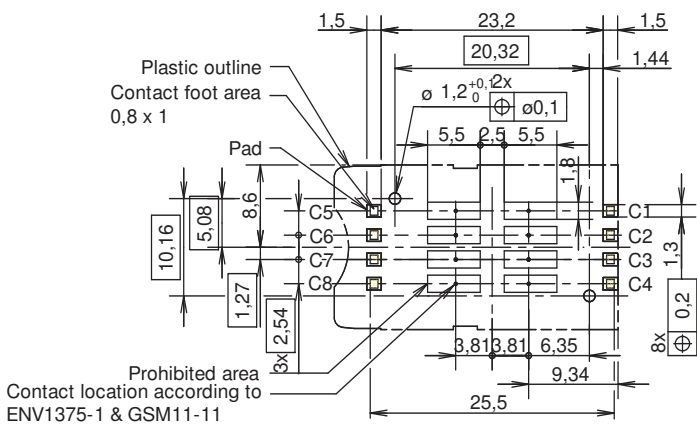
CCM03 MK2 Series

CCM03-3012 LFT

SIM/SAM



RECOMMENDED PC BOARD LAYOUT
(Component side)

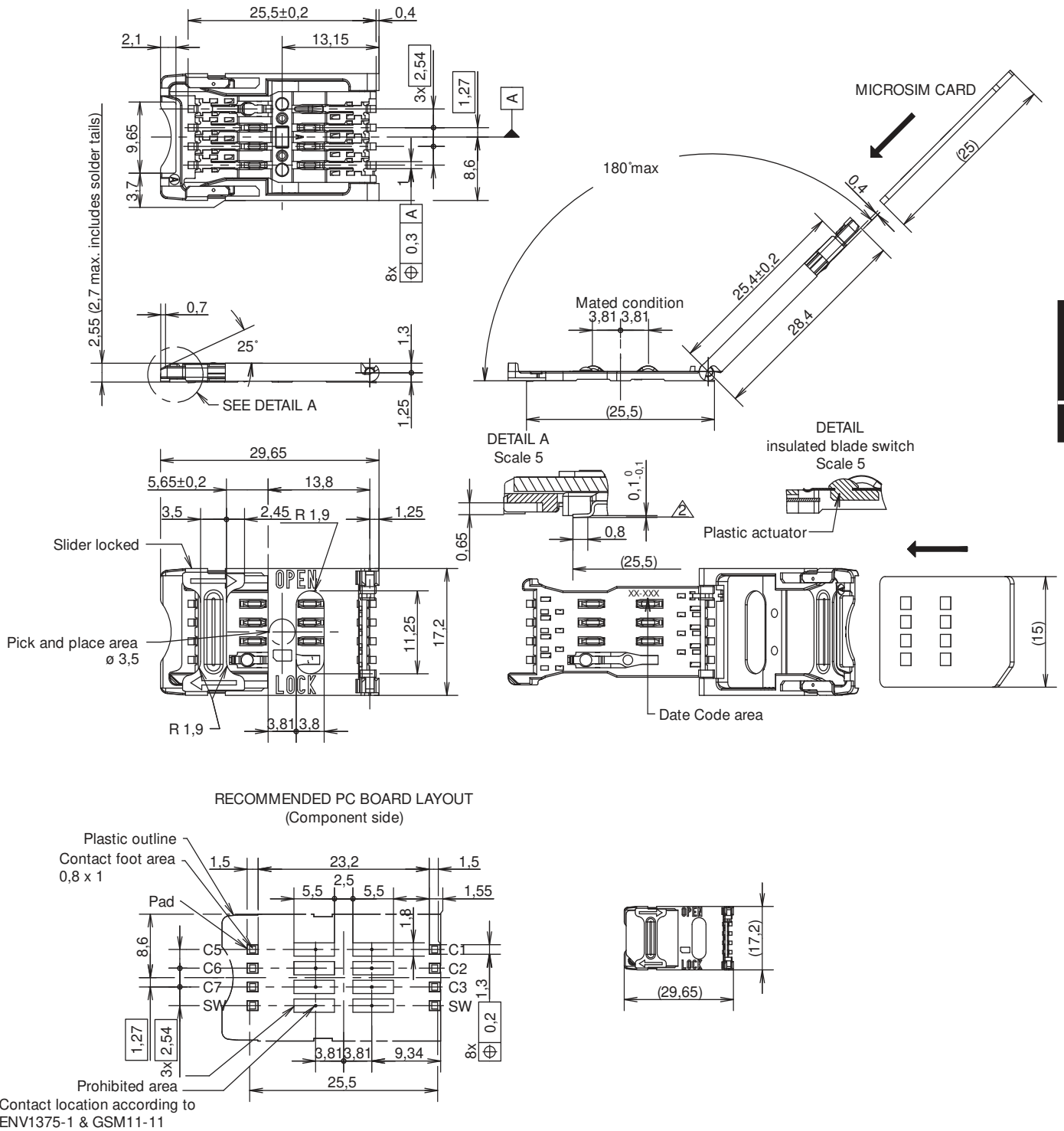


Dimensions are shown in mm
Specifications and dimensions subject to change



CCM03 MK2 Series

CCM03-3013 LFT



SIM/SAM



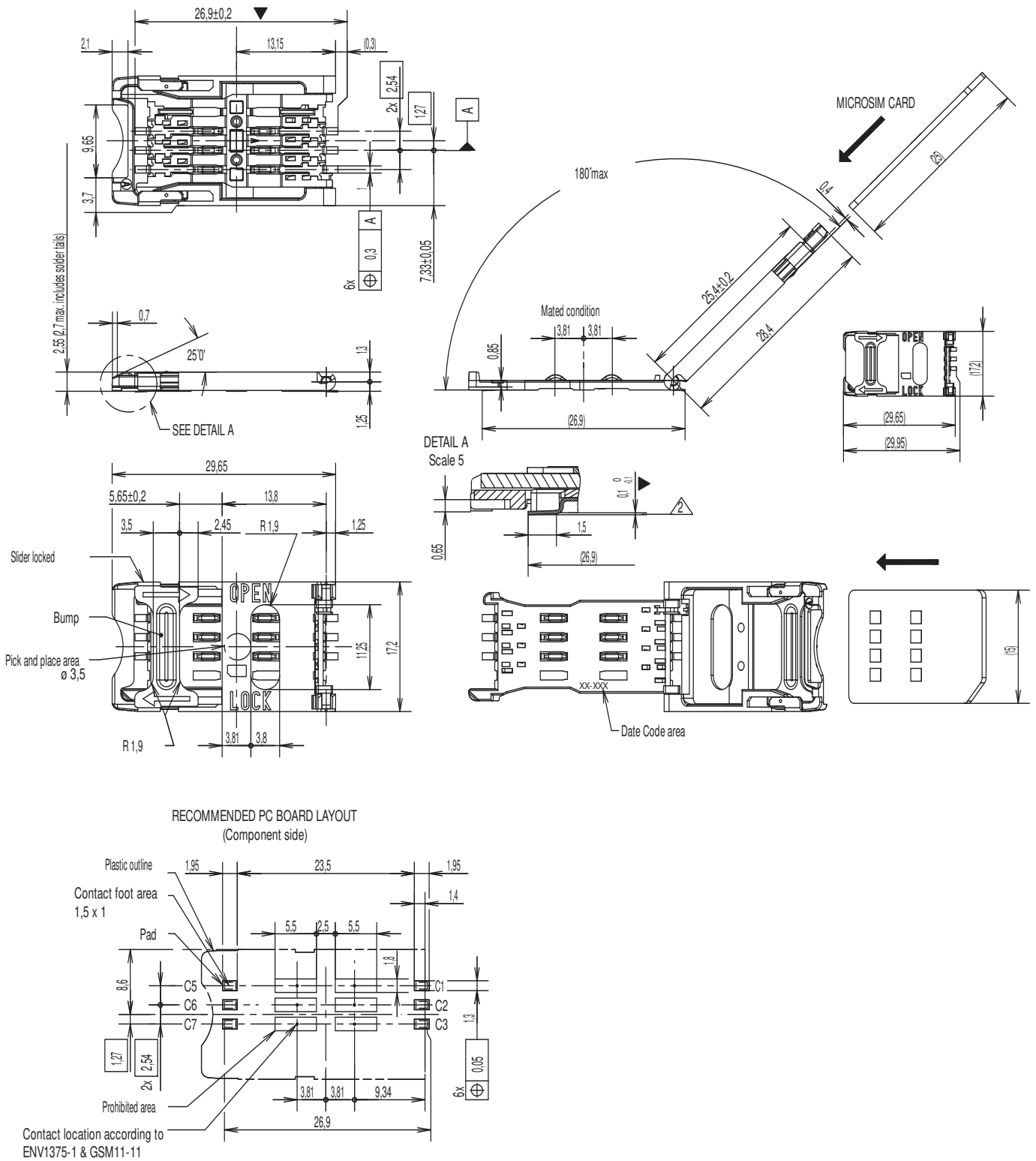
Dimensions are shown in mm
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CCM03 MK2 Series

CCM03-3512 LFT

SIM/SAM

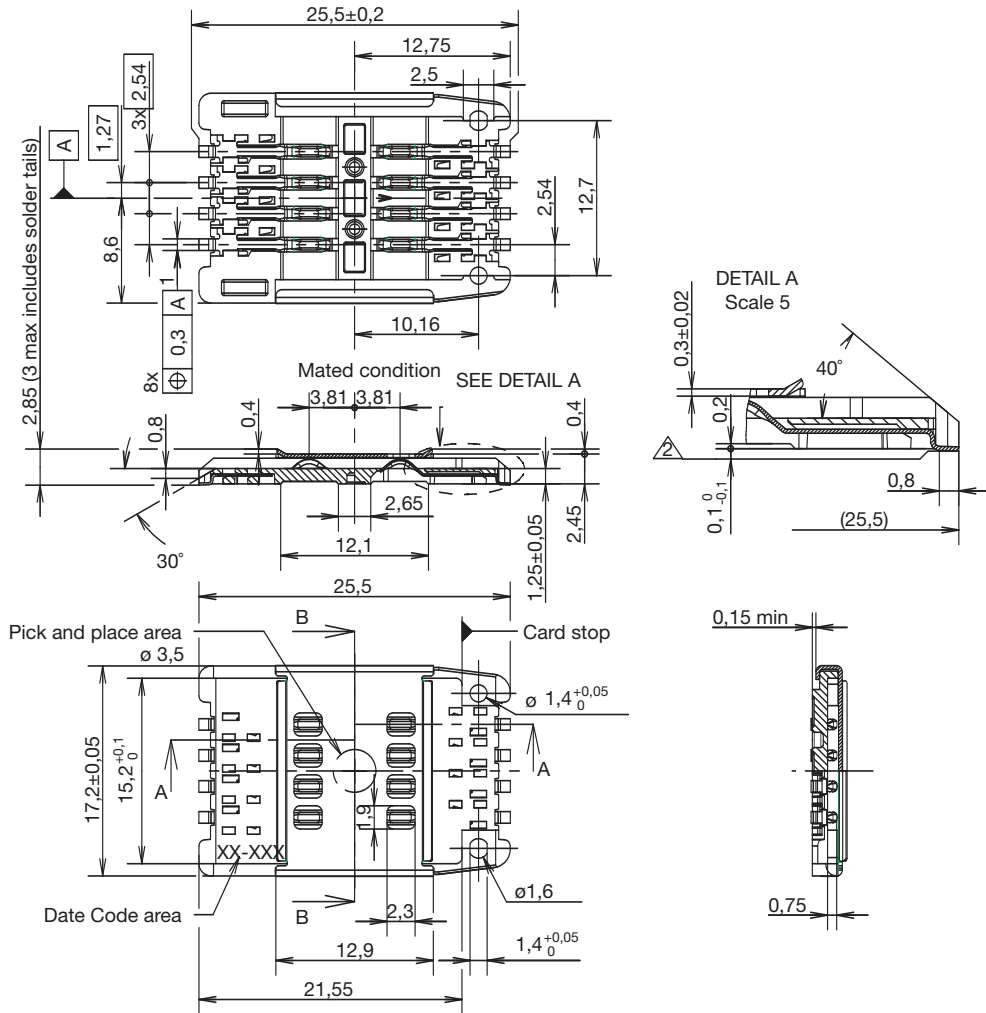


Dimensions are shown in mm
Specifications and dimensions subject to change

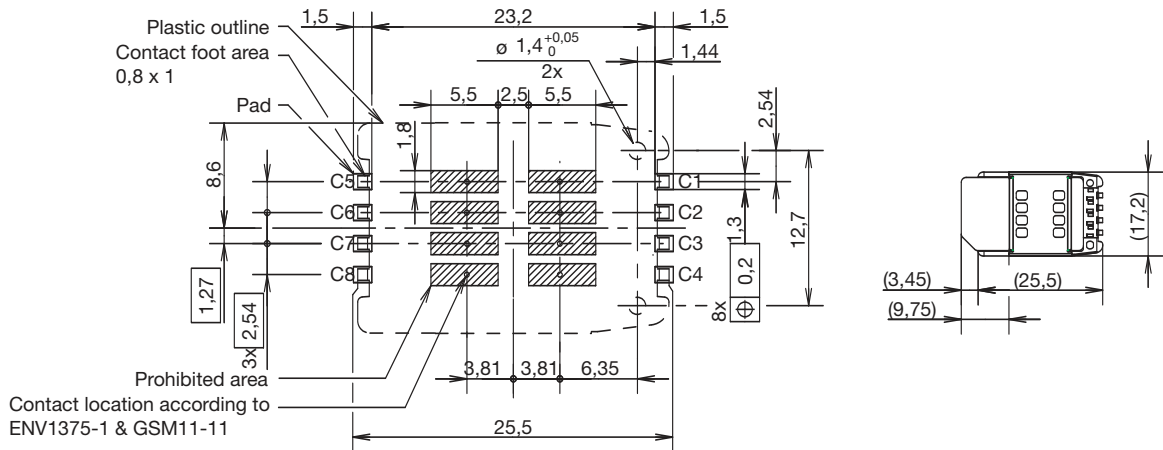
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CCM03 MK2 Series

CCM03-3504 LFT / CCM03-3505 LFT



RECOMMENDED PC BOARD LAYOUT
(Component side)



SIM/SAM

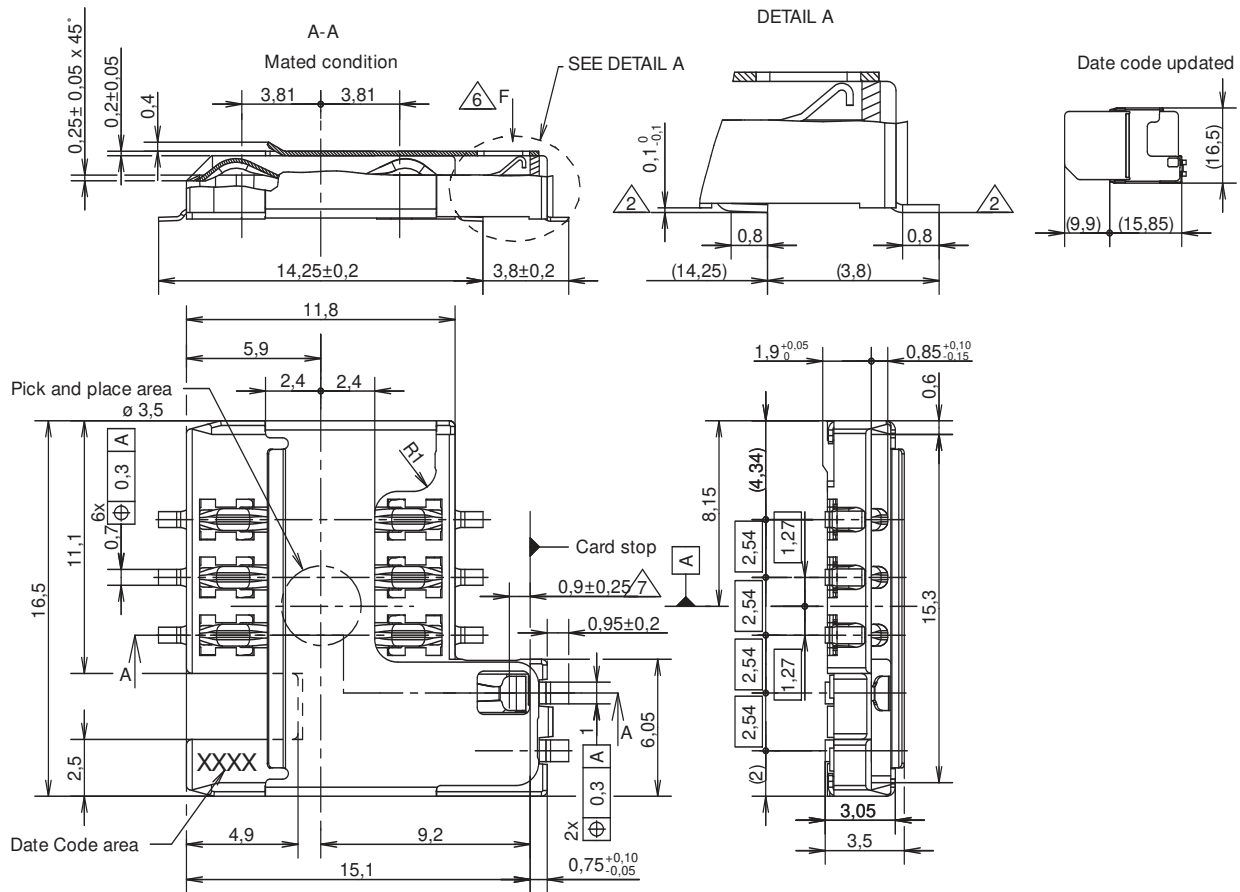


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Specifications and dimensions subject to change

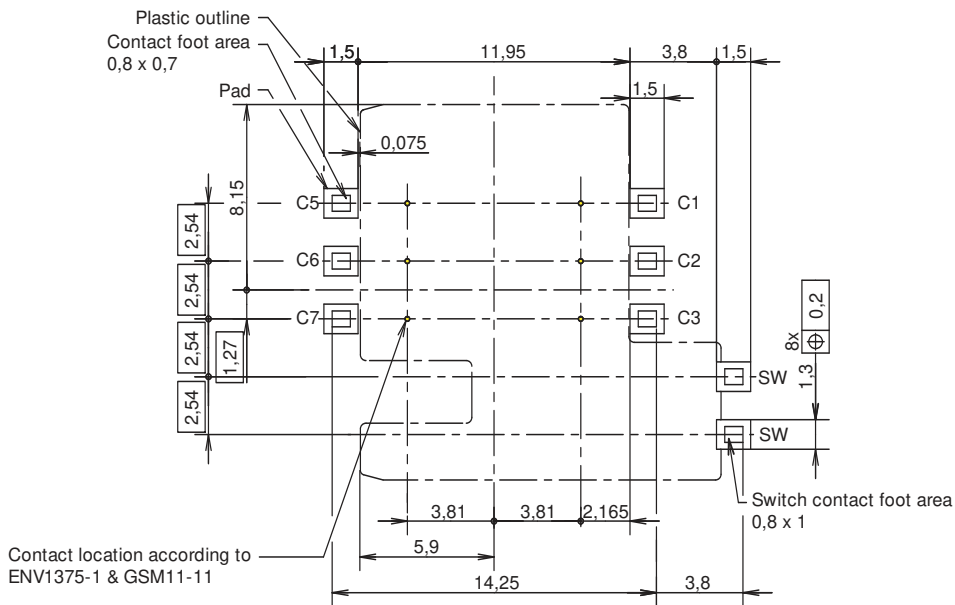
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CCM03 MK2 Series

CCM03-3754 LFT



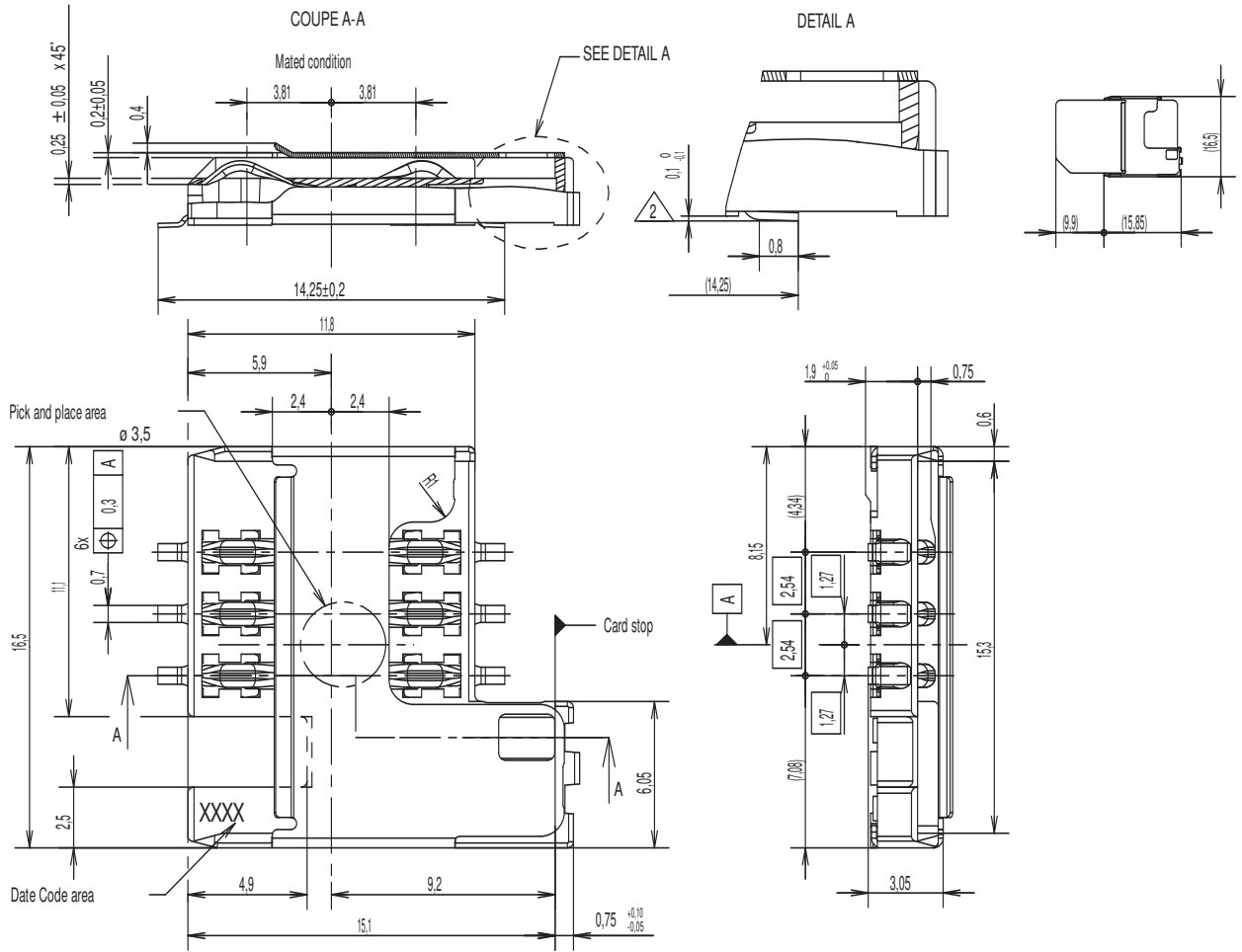
RECOMMENDED PC BOARD LAYOUT
(Component side)



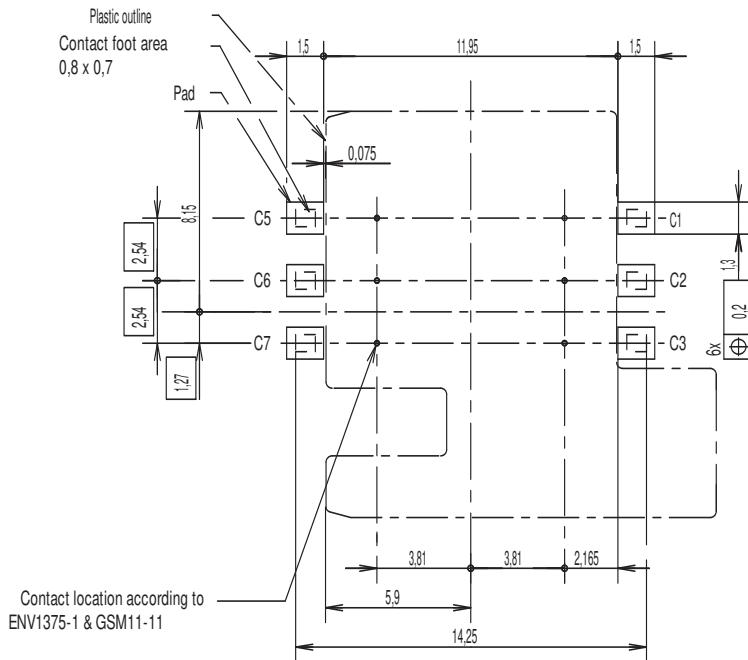
Dimensions are shown in mm
Specifications and dimensions subject to change

CCM03 MK2 Series

CCM03-3760 LFT



RECOMMENDED PC BOARD LAYOUT
 (Component side)

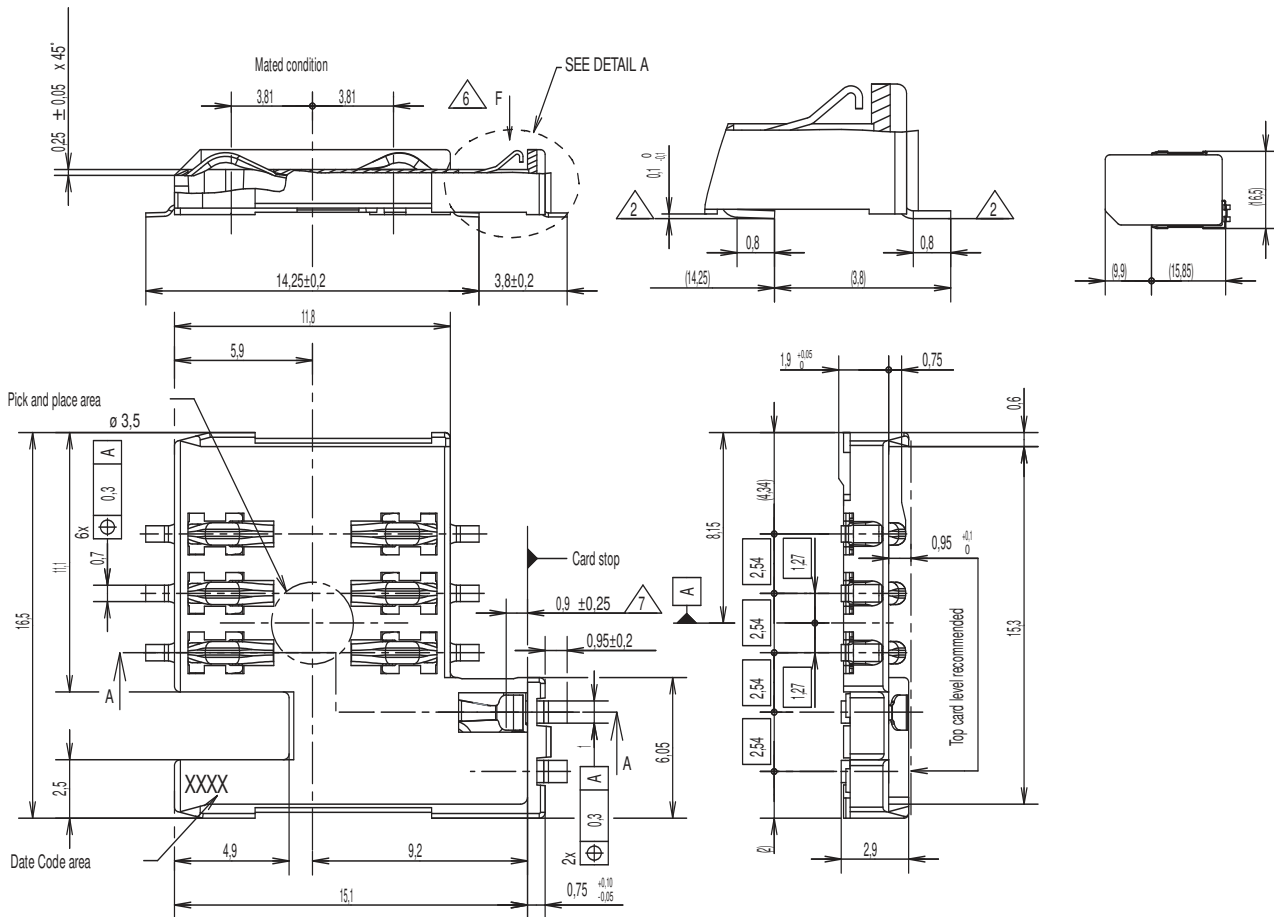


Dimensions are shown in mm
 Specifications and dimensions subject to change

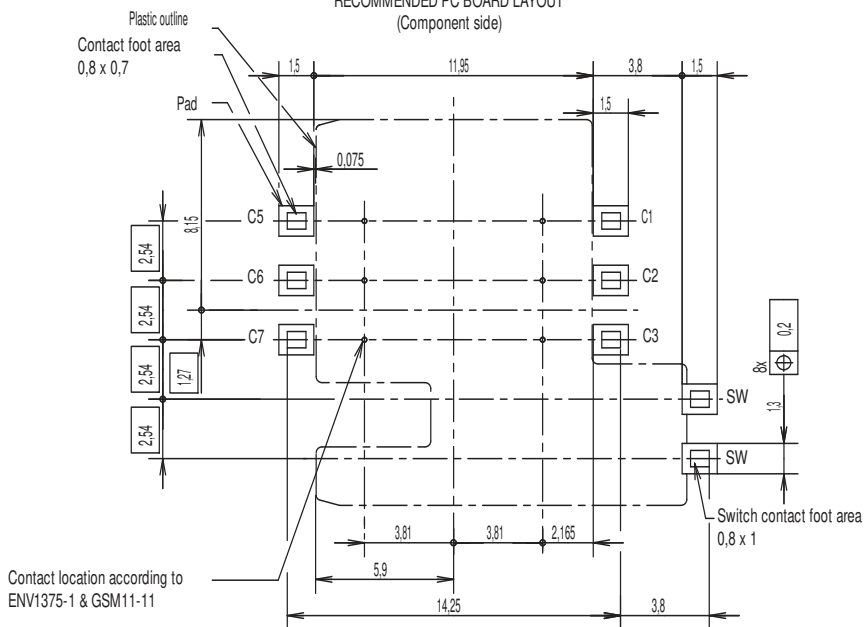
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CCM03 MK2 Series

CCM03-3764 LFT



RECOMMENDED PC BOARD LAYOUT
(Component side)



Dimensions are shown in mm
Specifications and dimensions subject to change

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CCM04 MK3 Series



Features

- **SIM and SAM card acceptance**
- **Compatible with pick and place and lead free soldering**

Typical Applications

- **Mobile**
- **POS**
- **Identification**
- **GPS**

Mechanical

| | |
|--------------------------|---|
| Number of contacts | 6 or 8 |
| Mechanical life | 30,000 cycles |
| Card insertion force | 10N max |
| Card extraction force | 1N min / 10N max |
| Contact force | 0,35N min to 0,65N |
| Vibration Frequency | 10 to 500 Hz. Acceleration 50m/s ² Duration 6 hours - amplitude 0,35mm |
| Shock | Peak value 500 m/s ² – Duration 11 ms 3 shocks in each direction of each axis |
| Max elect. discontinuity | 1µs |

Packaging

See table below

Soldering Process

Compatible with lead free SMT soldering process

Contact Electrical Data

| | |
|------------------------|---------------------|
| Insulation resistance | 1000 MΩ min |
| Contact resistance max | 100 mΩ max |
| Switching current | 10 µA min / 1 A max |
| Dielectric strength | 750 Vrms min |

Environmental Data

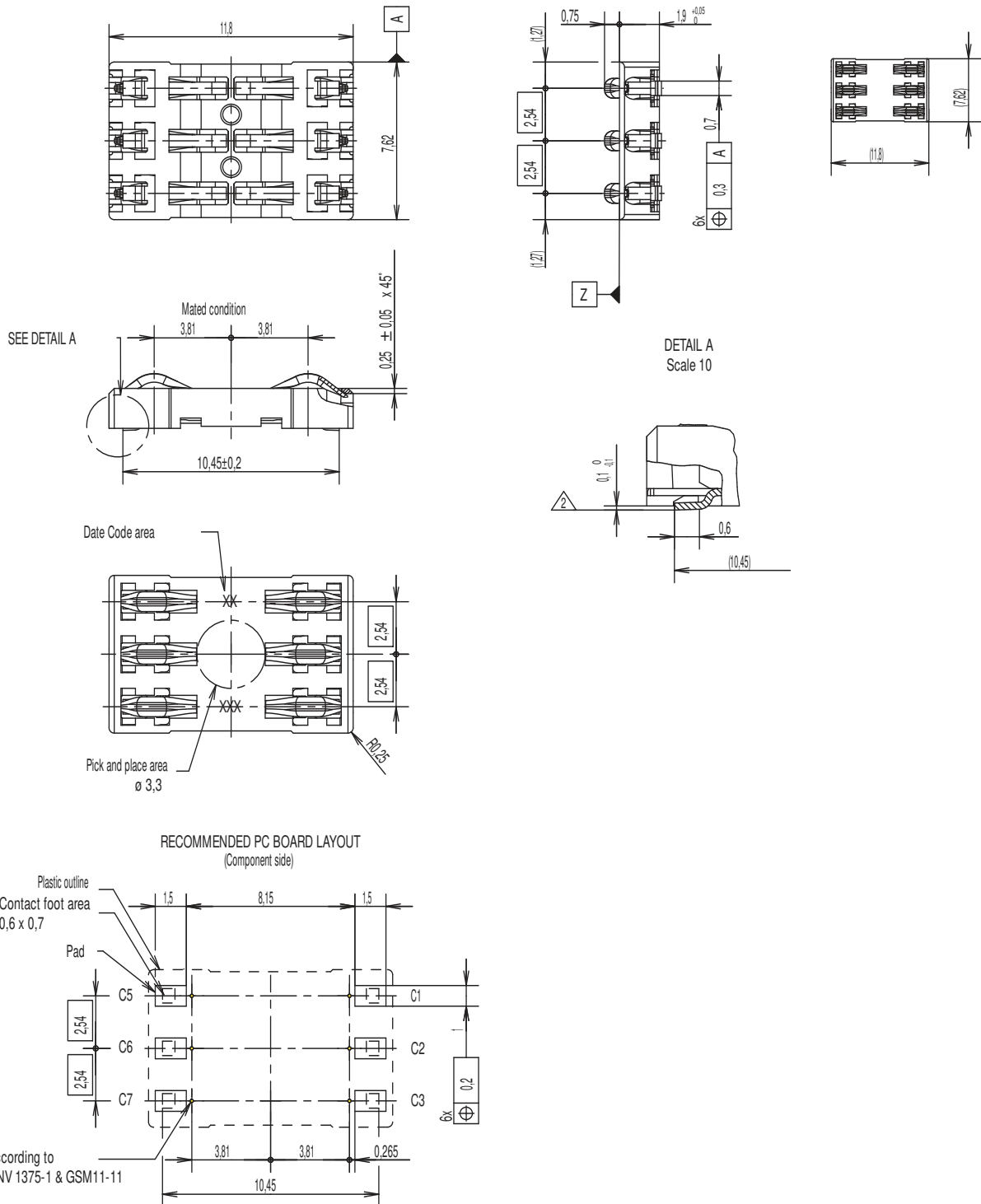
| | |
|-----------------------|------------------------------------|
| Operating temperature | -40°C to +85°C |
| Salt mist | IEC 512 test number 11f (96 hours) |
| Damp heat | IEC 512 test number 11c (10 days) |
| RoHS compliant | |

SIM/SAM

| Designation | # of Contacts | Contact Plating | PCB Version | Height (mm) | Dim. (mm) | Packaging |
|---------------|---------------|-----------------|-------------|-------------|--------------|--------------------|
| CCM04-5137LFS | 6 | gold | SMT IN | 1,9 | 8,15 X 10,45 | reels of 1,900 pcs |

CCM04 MK3 Series

CCM04-5137 LFS



SIM/SAM



Dimensions are shown in mm
Specifications and dimensions subject to change

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