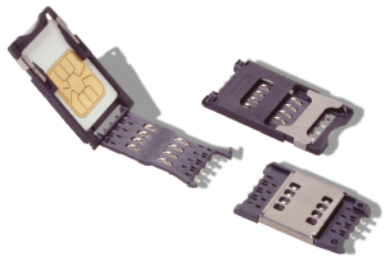
CCM03 MK2 Series

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

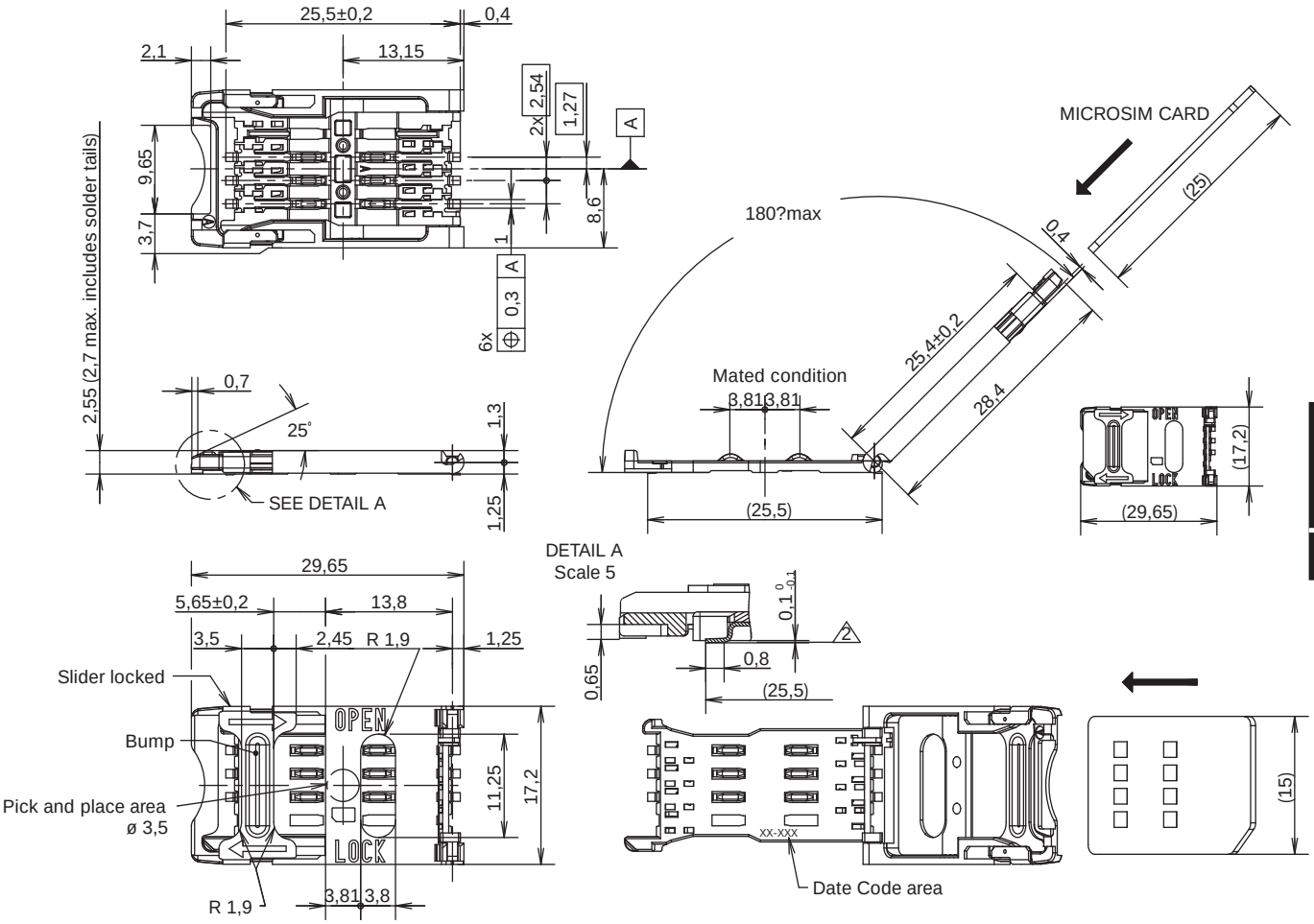
Contact Electrical Data

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

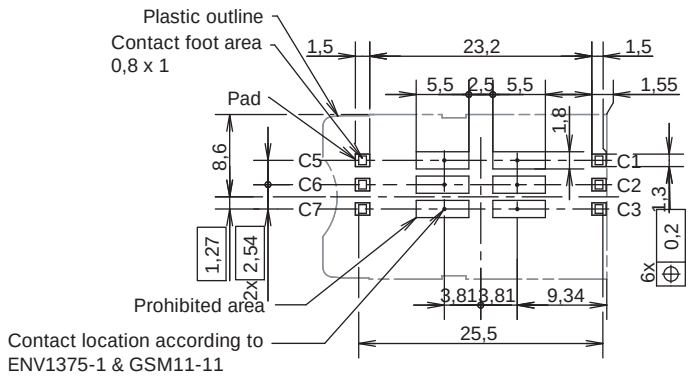
Designation	Contact Plating	Cover	# of Contacts	PCB Version	Card Presence Switch	Operating Life	Total Height (mm)	Dim. (mm)	Packaging
CCM03-3001LFT	inlay	hinged	6		without	10,000	2,55	17,2 x 29,65	reels of 1,000 pcs
CCM03-3002LFT	inlay	hinged	6	2 plastic pegs	without	10,000	2,55	17,2 x 29,65	reels of 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

CCM03-3001 LFT / CCM03-3009 LFT



RECOMMENDED PC BOARD LAYOUT
(Component side)



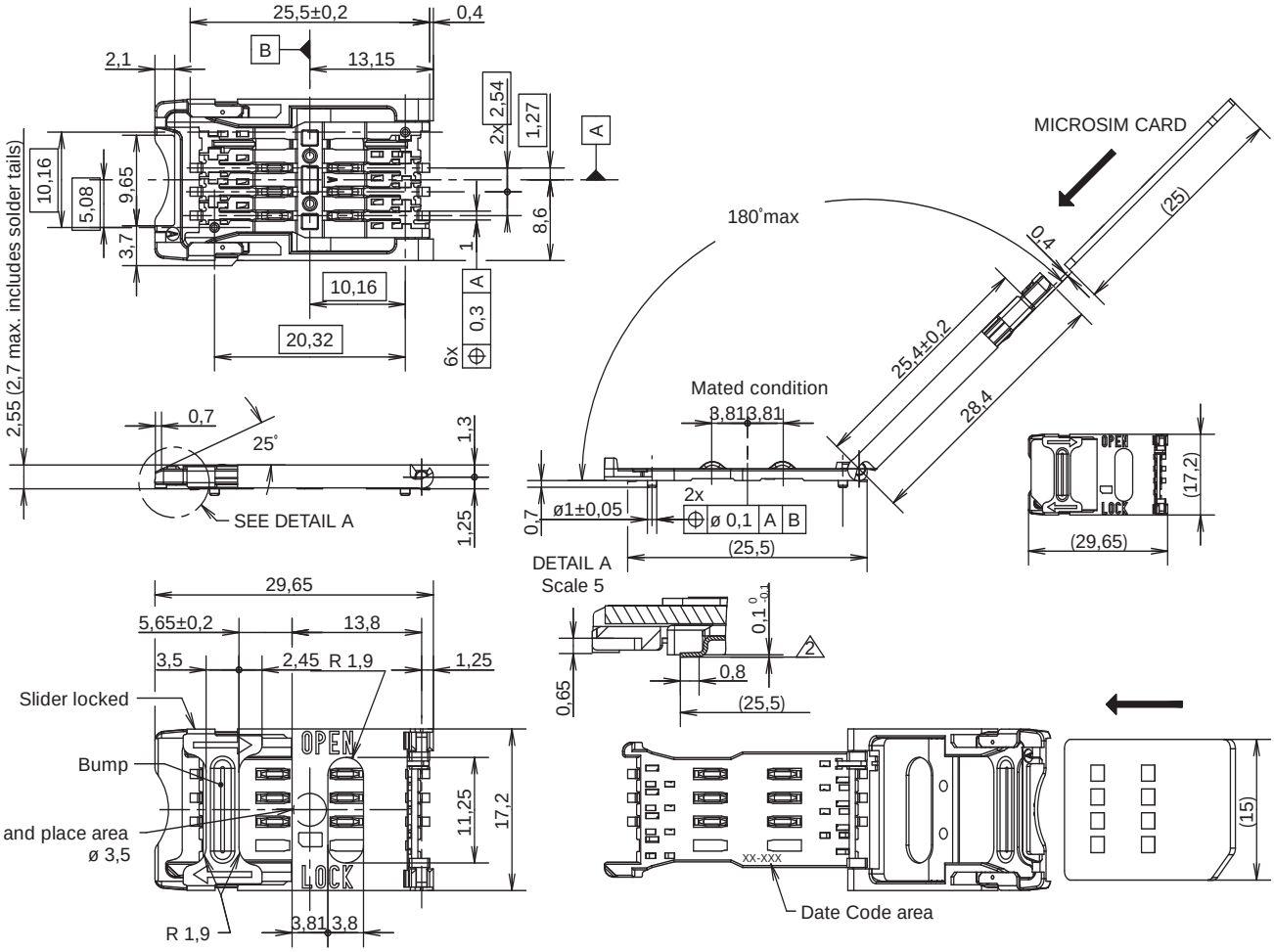
SIM/SAM

First Angle Projection

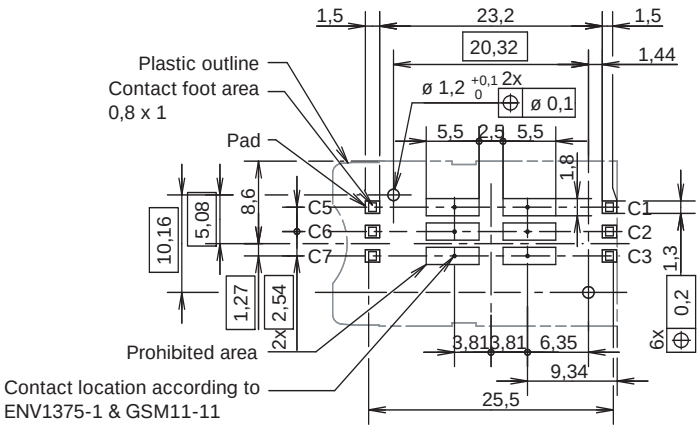
Dimensions are shown in mm
Specifications and dimensions subject to change

CCM03 MK2 Series

CCM03-3002 LFT / CCM03-3010 LFT



RECOMMENDED PC BOARD LAYOUT
(Component side)



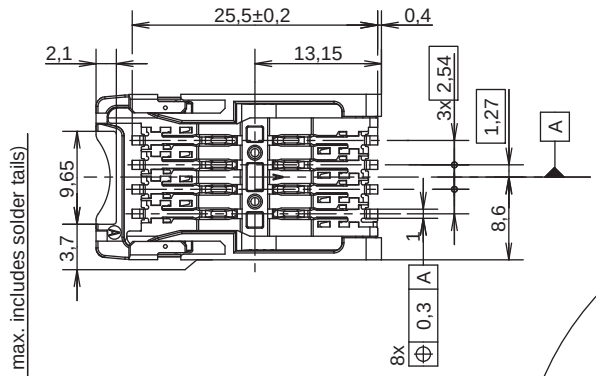
SIM/SAM

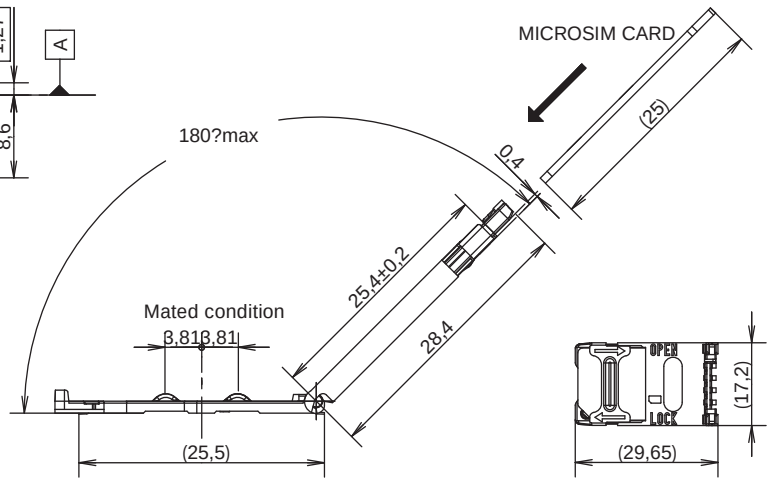
First Angle Projection

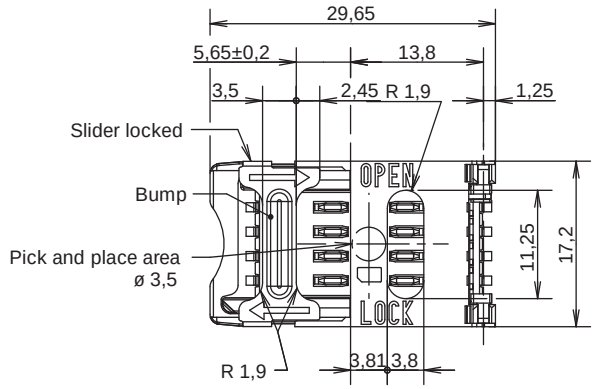
Dimensions are shown in mm
Specifications and dimensions subject to change

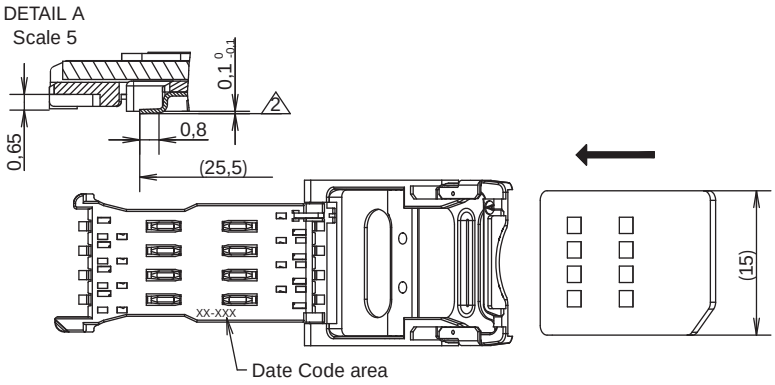
www.ck-components.com

CCM03-3003 LFT

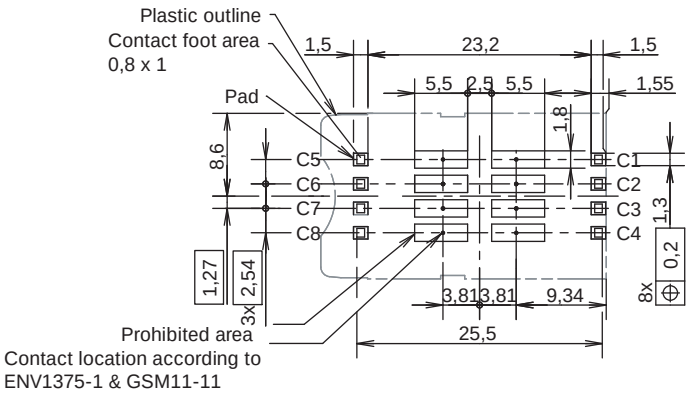








RECOMMENDED PC BOARD LAYOUT
(Component side)



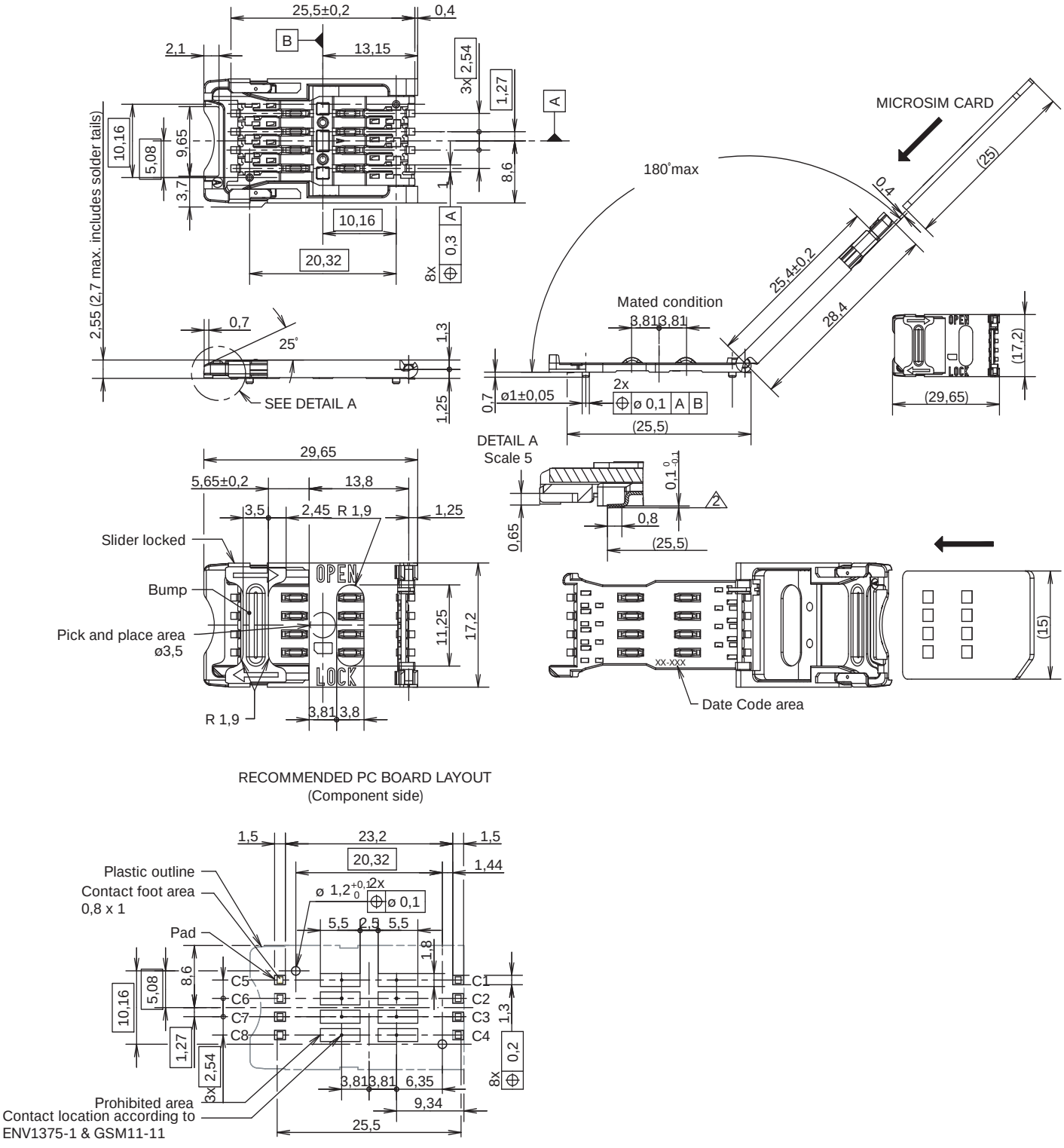
SIM/SAM

First Angle Projection

Dimensions are shown in mm
Specifications and dimensions subject to change

CCM03 MK2 Series

CCM03-3004 LFT



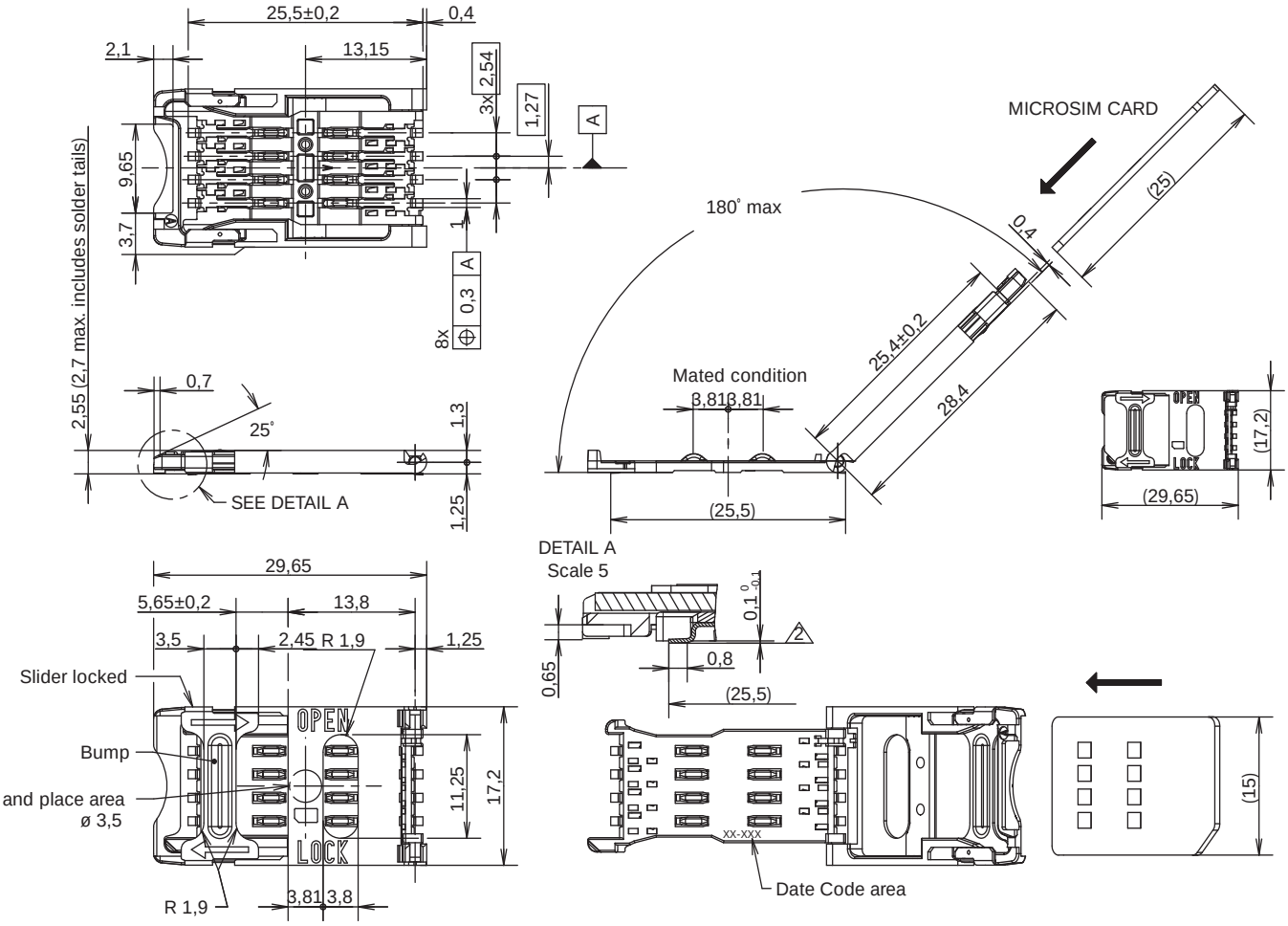
RECOMMENDED PC BOARD LAYOUT
(Component side)

First Angle Projection

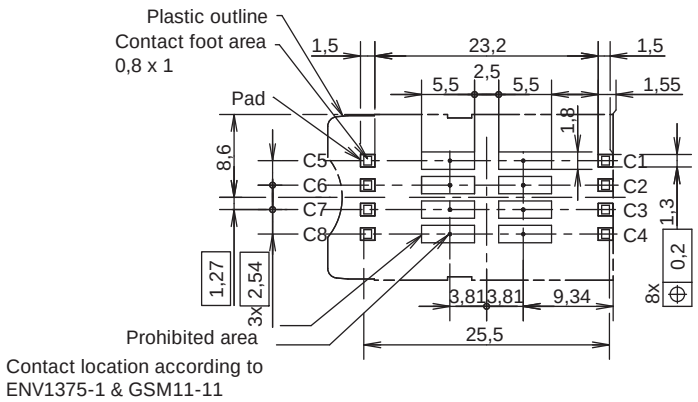
Dimensions are shown in mm
Specifications and dimensions subject to change

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CCM03-3011 LFT



RECOMMENDED PC BOARD LAYOUT
(Component side)



Contact location according to
ENV1375-1 & GSM11-11

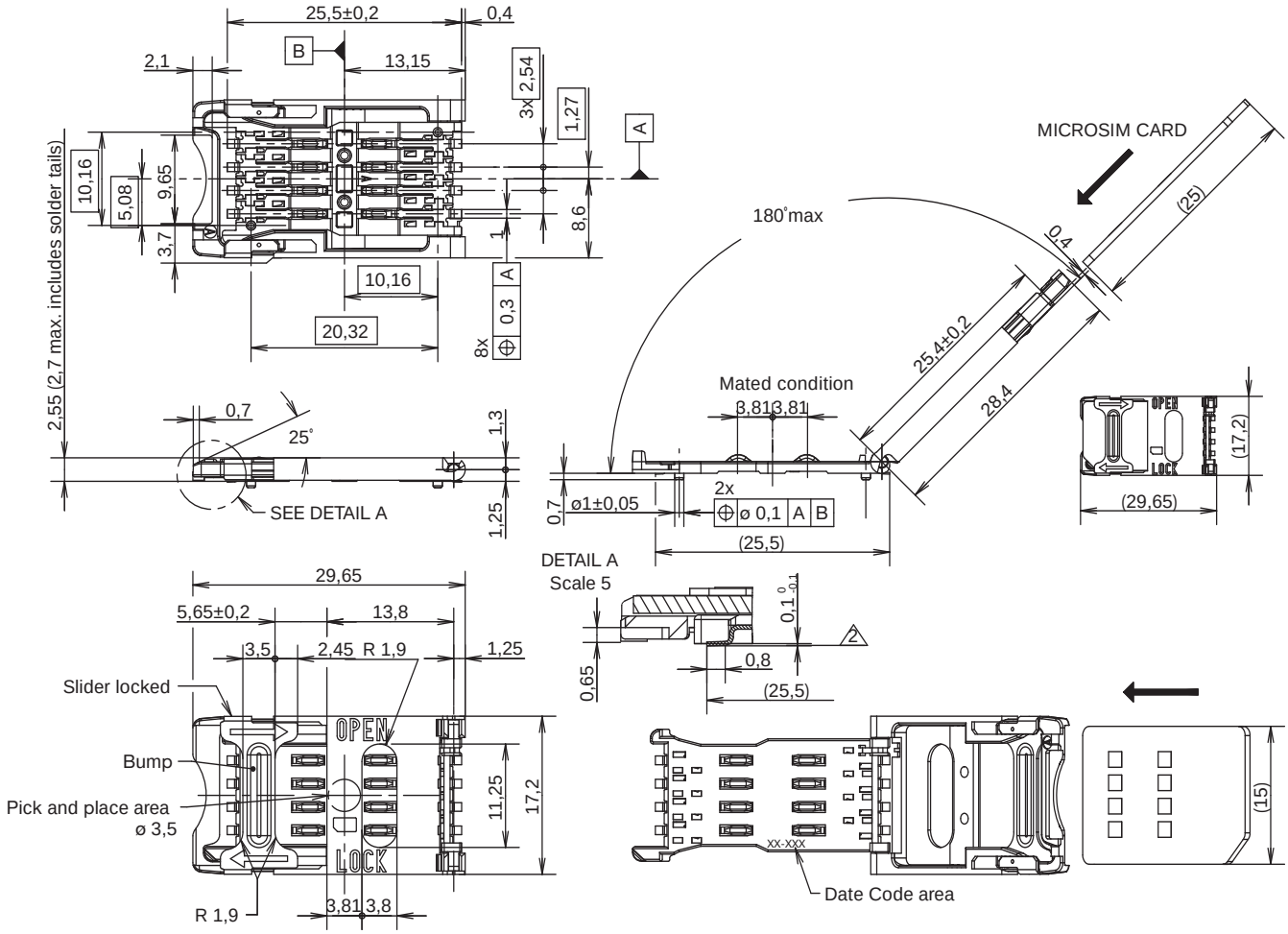
SIM/SAM

First Angle Projection

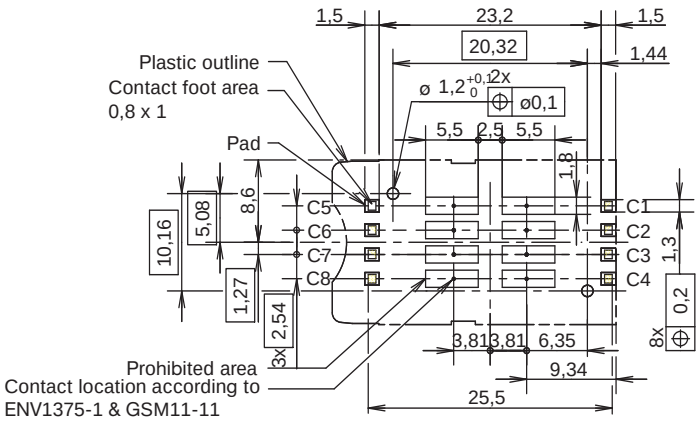
Dimensions are shown in mm
Specifications and dimensions subject to change

CCM03 MK2 Series

CCM03-3012 LFT



RECOMMENDED PC BOARD LAYOUT
(Component side)

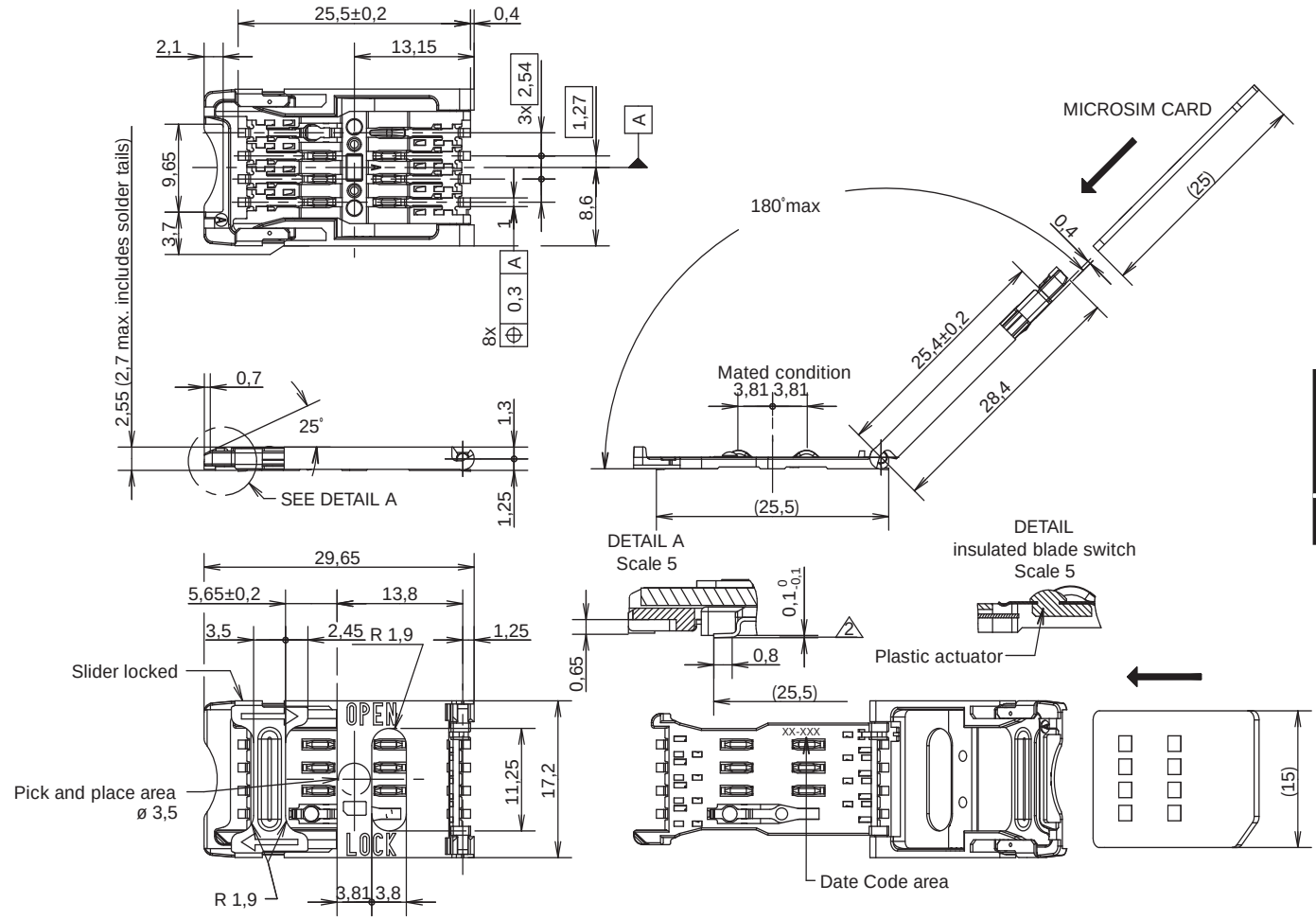


First Angle Projection

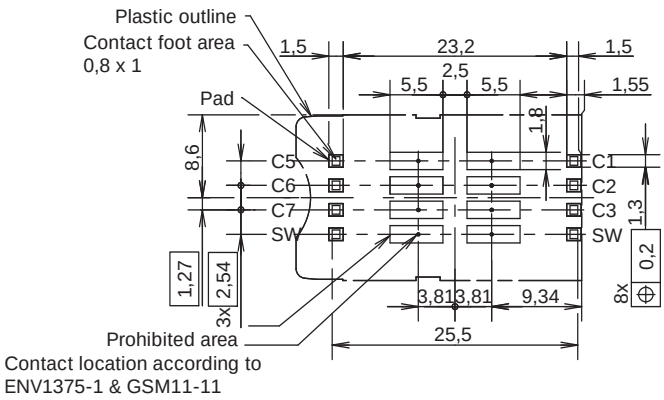
Dimensions are shown in mm
Specifications and dimensions subject to change

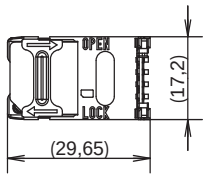
www.ck-components.com

CCM03-3013 LFT



RECOMMENDED PC BOARD LAYOUT
(Component side)





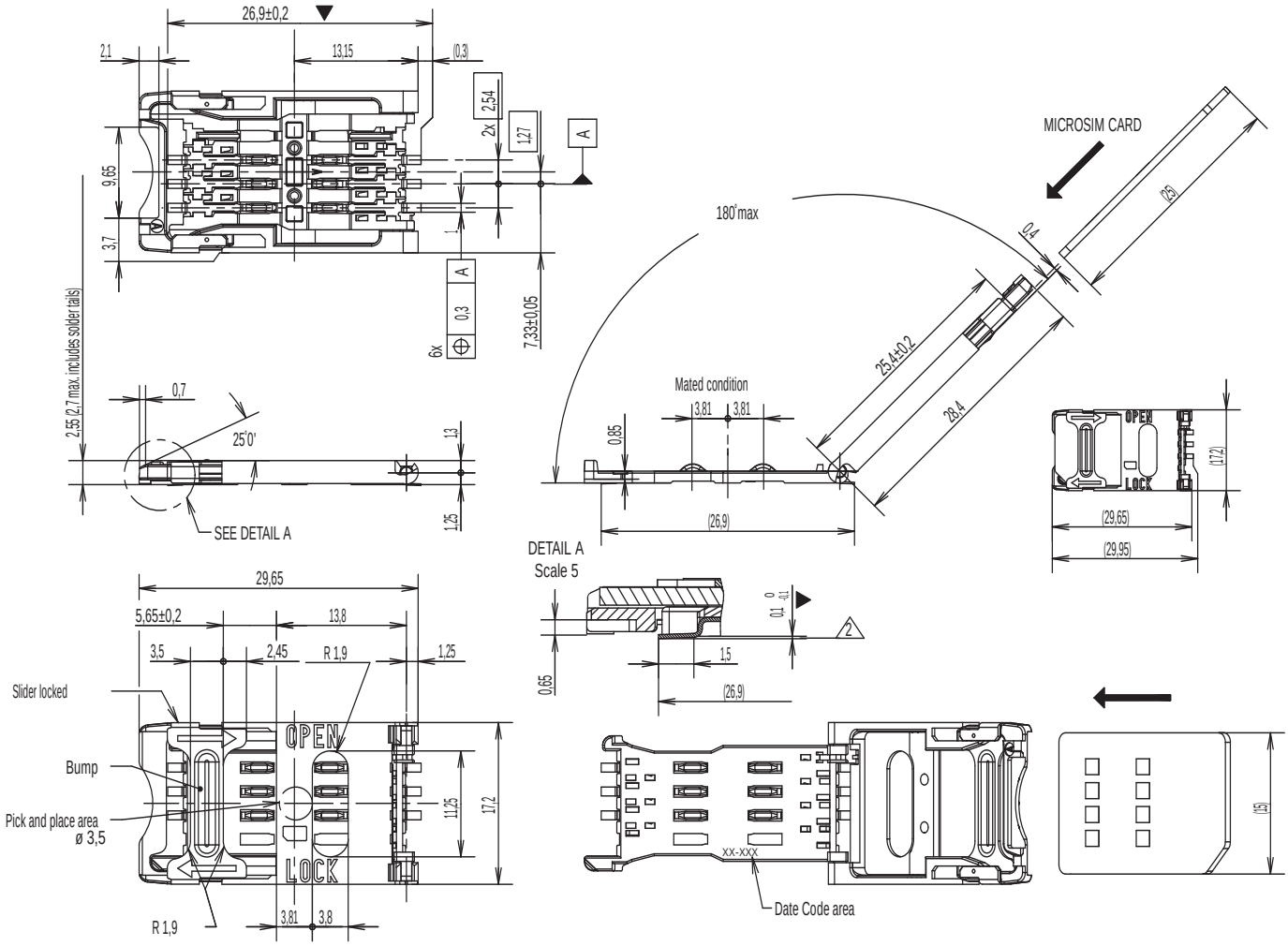
SIM/SAM

First Angle Projection

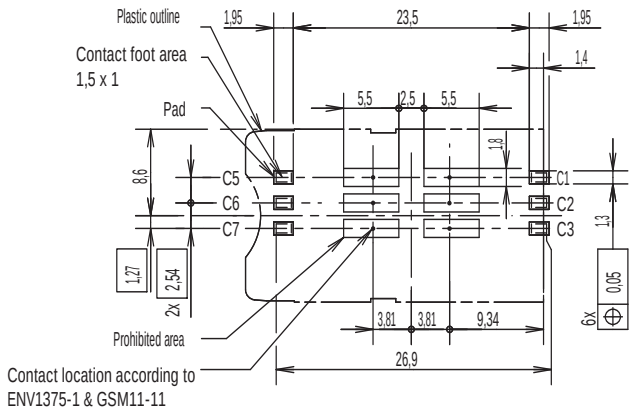
Dimensions are shown in mm
Specifications and dimensions subject to change

CCM03 MK2 Series

CCM03-3512 LFT



RECOMMENDED PC BOARD LAYOUT
(Component side)

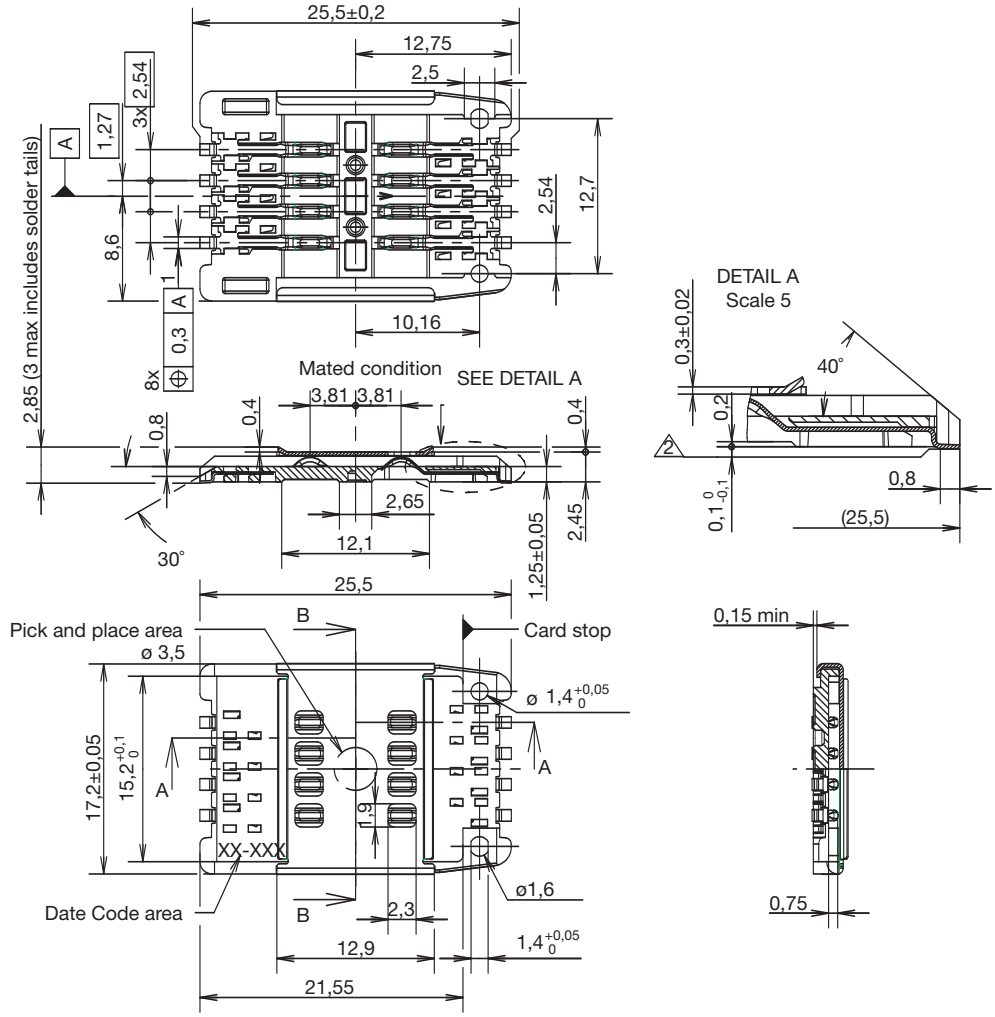


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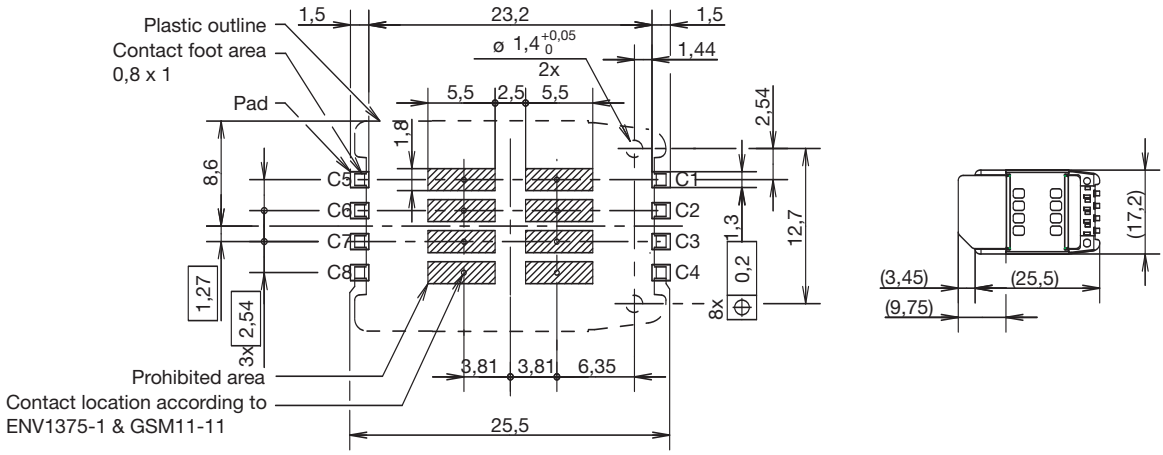
Dimensions are shown in mm
Specifications and dimensions subject to change

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CCM03-3504 LFT / CCM03-3505 LFT



RECOMMENDED PC BOARD LAYOUT
(Component side)

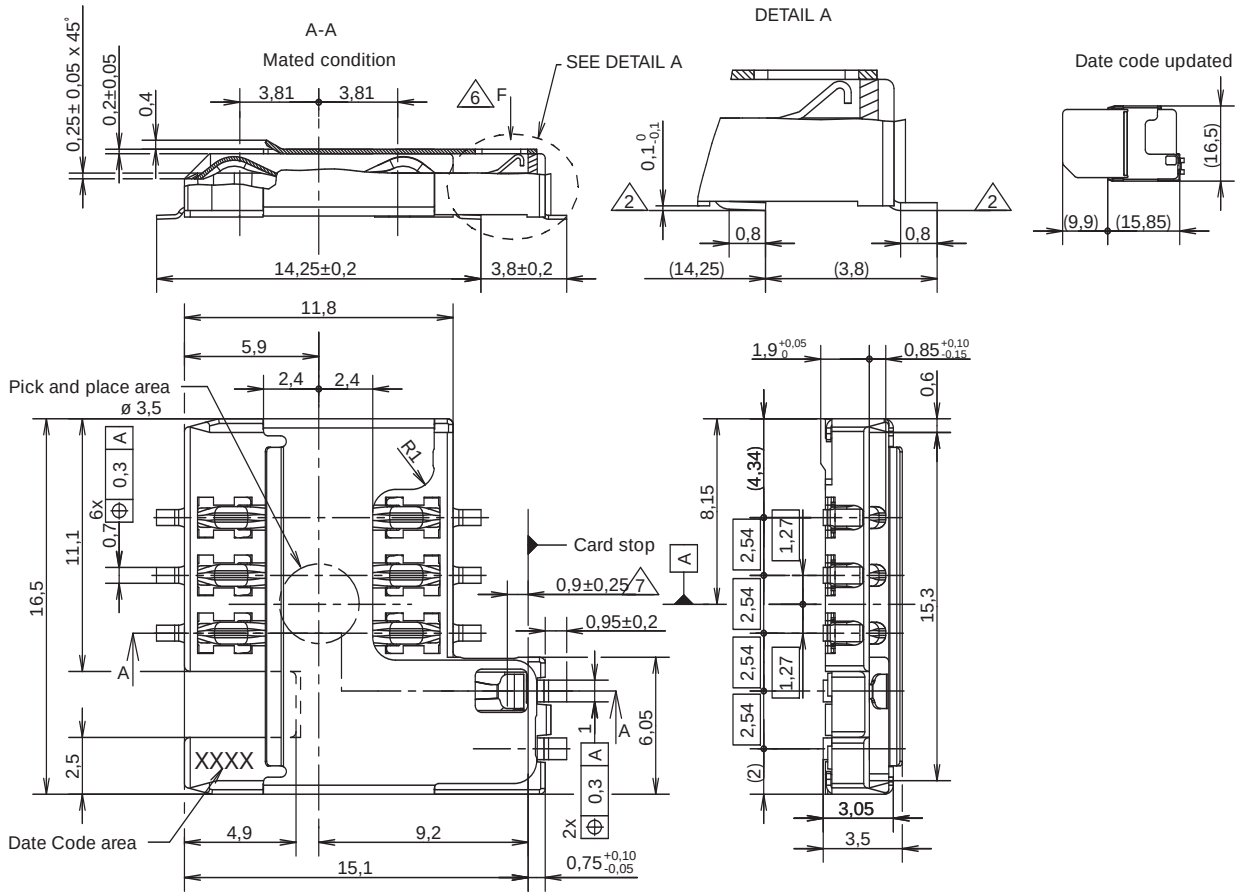


First Angle Projection

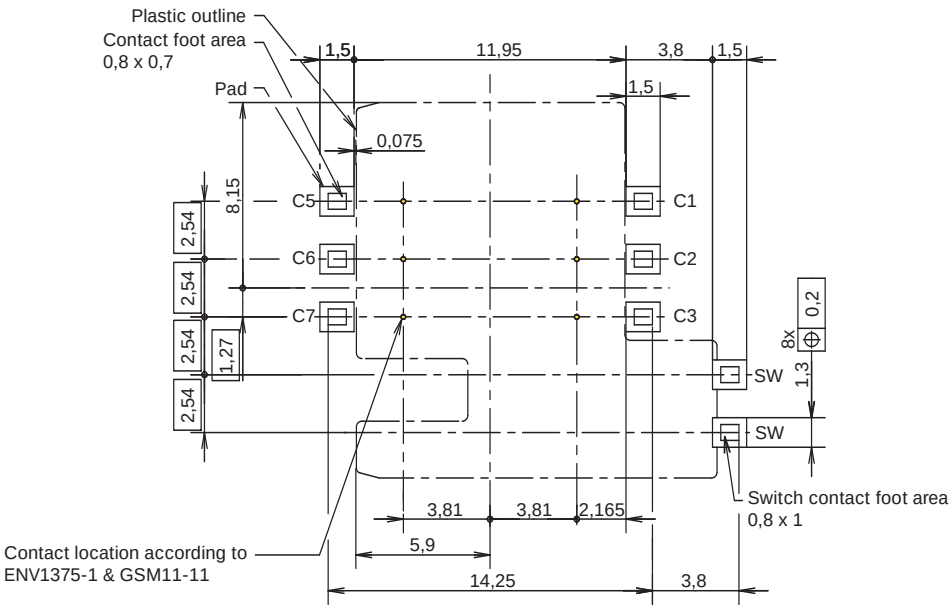
Dimensions are shown in mm
Specifications and dimensions subject to change

CCM03 MK2 Series

CCM03-3754 LFT



RECOMMENDED PC BOARD LAYOUT
(Component side)

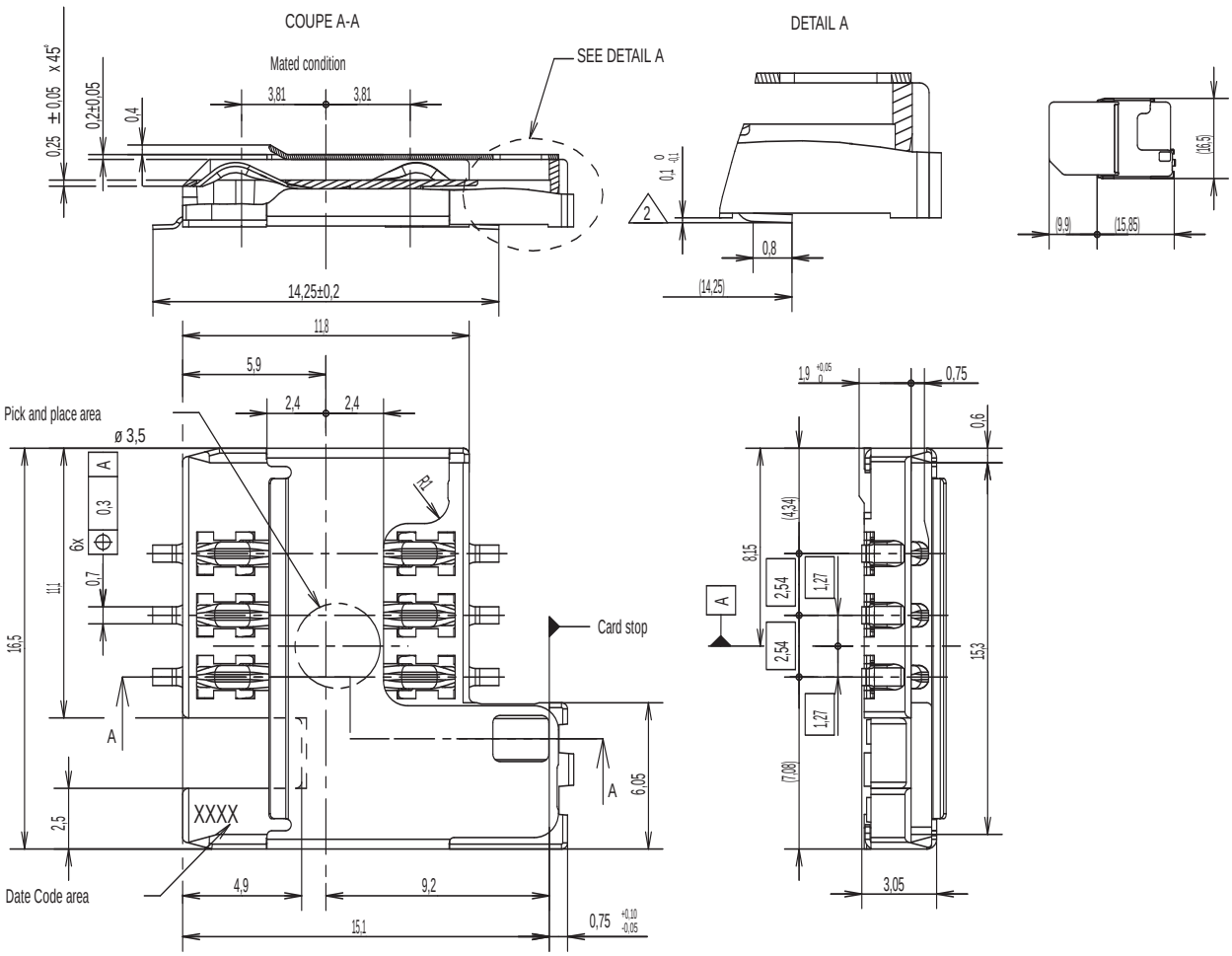


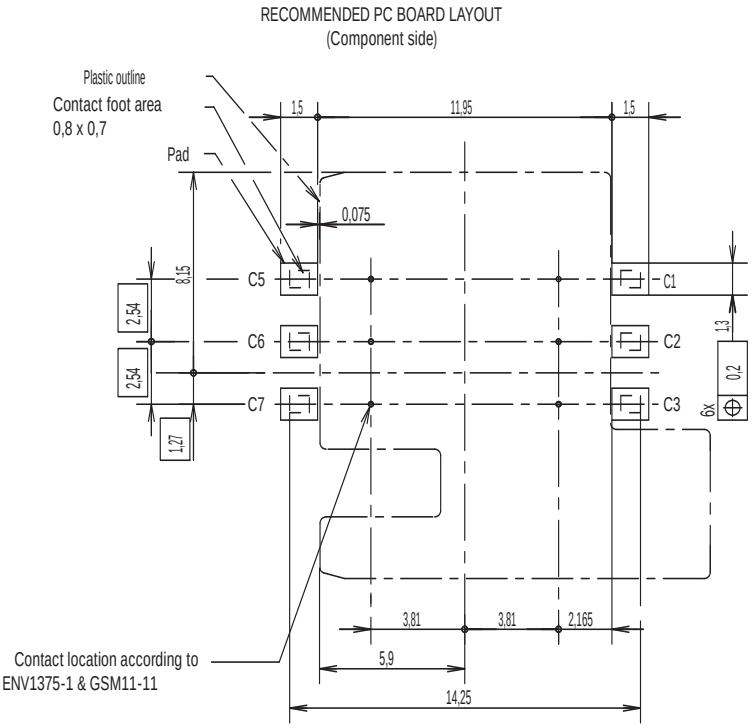
First Angle Projection

Dimensions are shown in mm
Specifications and dimensions subject to change

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CCM03-3760 LFT





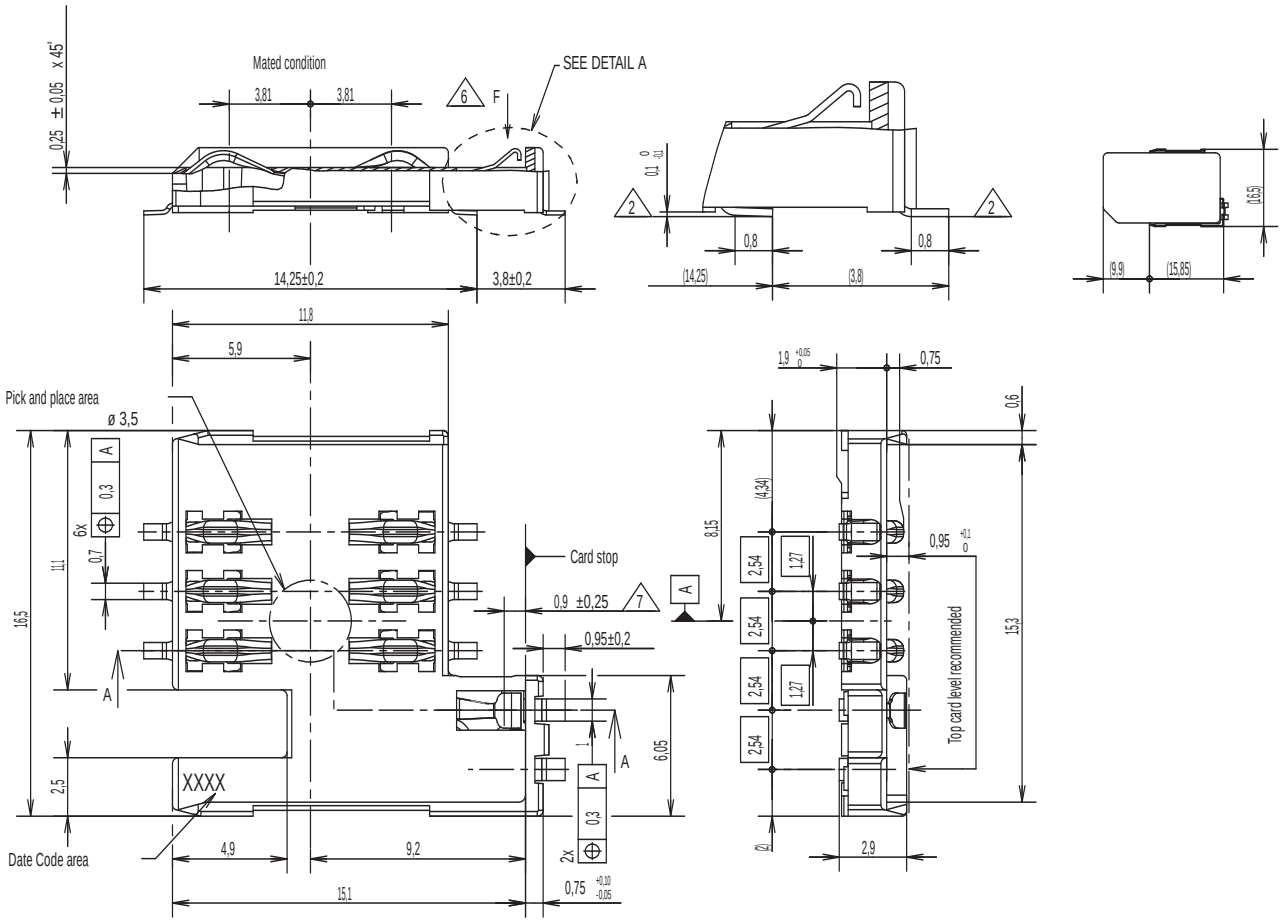
First Angle Projection

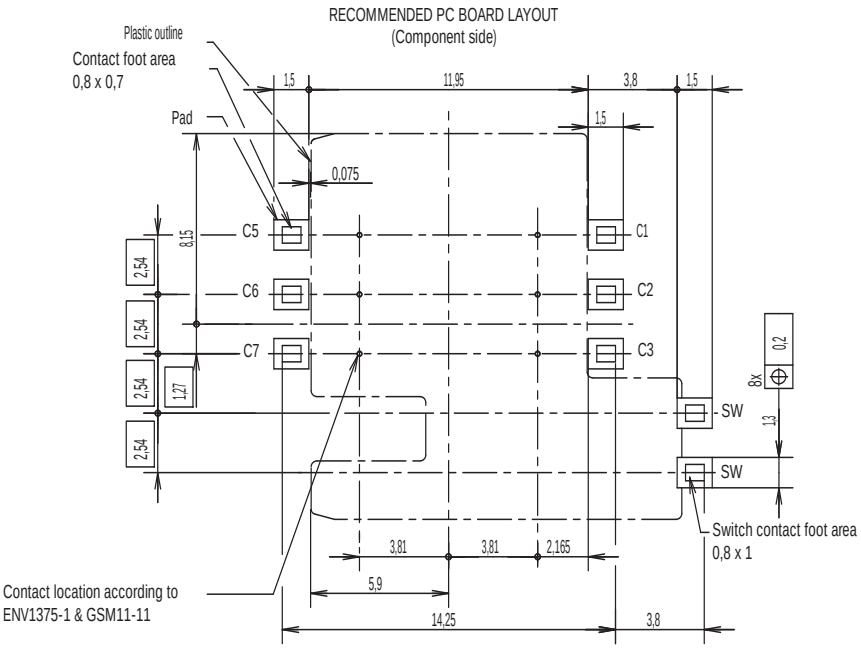
Dimensions are shown in mm
Specifications and dimensions subject to change

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CCM03 MK2 Series

CCM03-3764 LFT



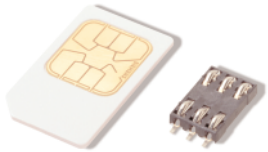


First Angle Projection

Dimensions are shown in mm
Specifications and dimensions subject to change

www.ck-components.com

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/s² Duration 6 hours - amplitude 0,35mm
Shock	Peak value 500 m/s² – 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

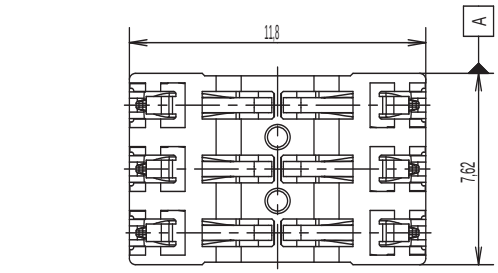
Environmental Data

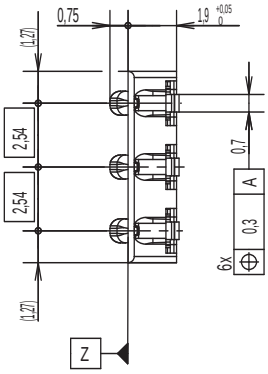
Operating temperature	-40°C to +85°C
Salt mist	IEC 512 test number 11f (96 hours)
Damp heat	IEC 512 test number 11c (10 days)
RoHS compliant	

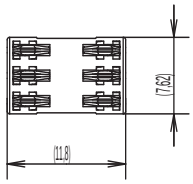
Designation	# of Contacts	Contact Plating	PCB Version	Height (mm)	Dim. (mm)	Packaging
CCM04-5137LFS	6	gold	SMT IN	1,9	8,15 X 10,45	reels of 1,900 pcs

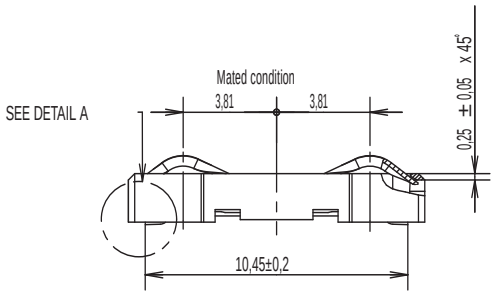
CCM04 MK3 Series

CCM04-5137 LFS

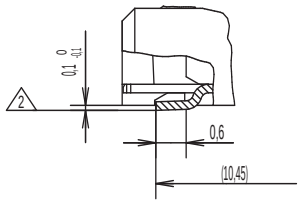


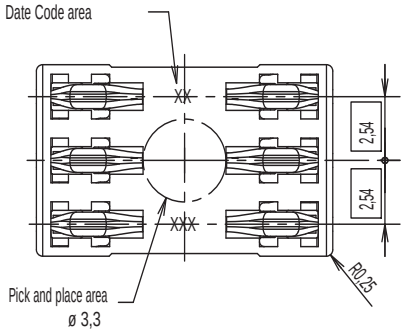




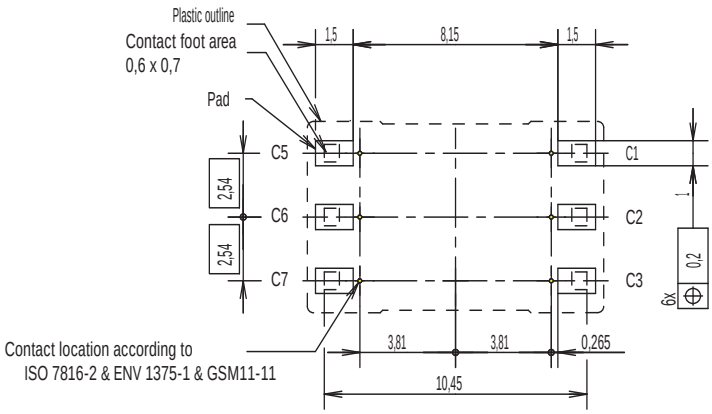


DETAIL A
Scale 10





RECOMMENDED PC BOARD LAYOUT
(Component side)



SIM/SAM

First Angle Projection

Dimensions are shown in mm
Specifications and dimensions subject to change

www.ck-components.com