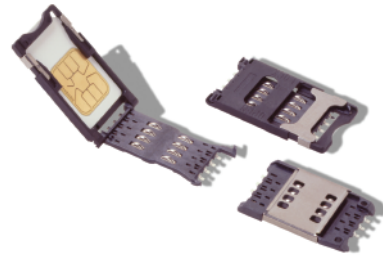


# CCM03 MK2 Series



## 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 <sup>2</sup> Duration 6 hours - amplitude 0,35 mm
Max electrical discontinuity	1µs
Shock	Peak value 500 m/s <sup>2</sup> – 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

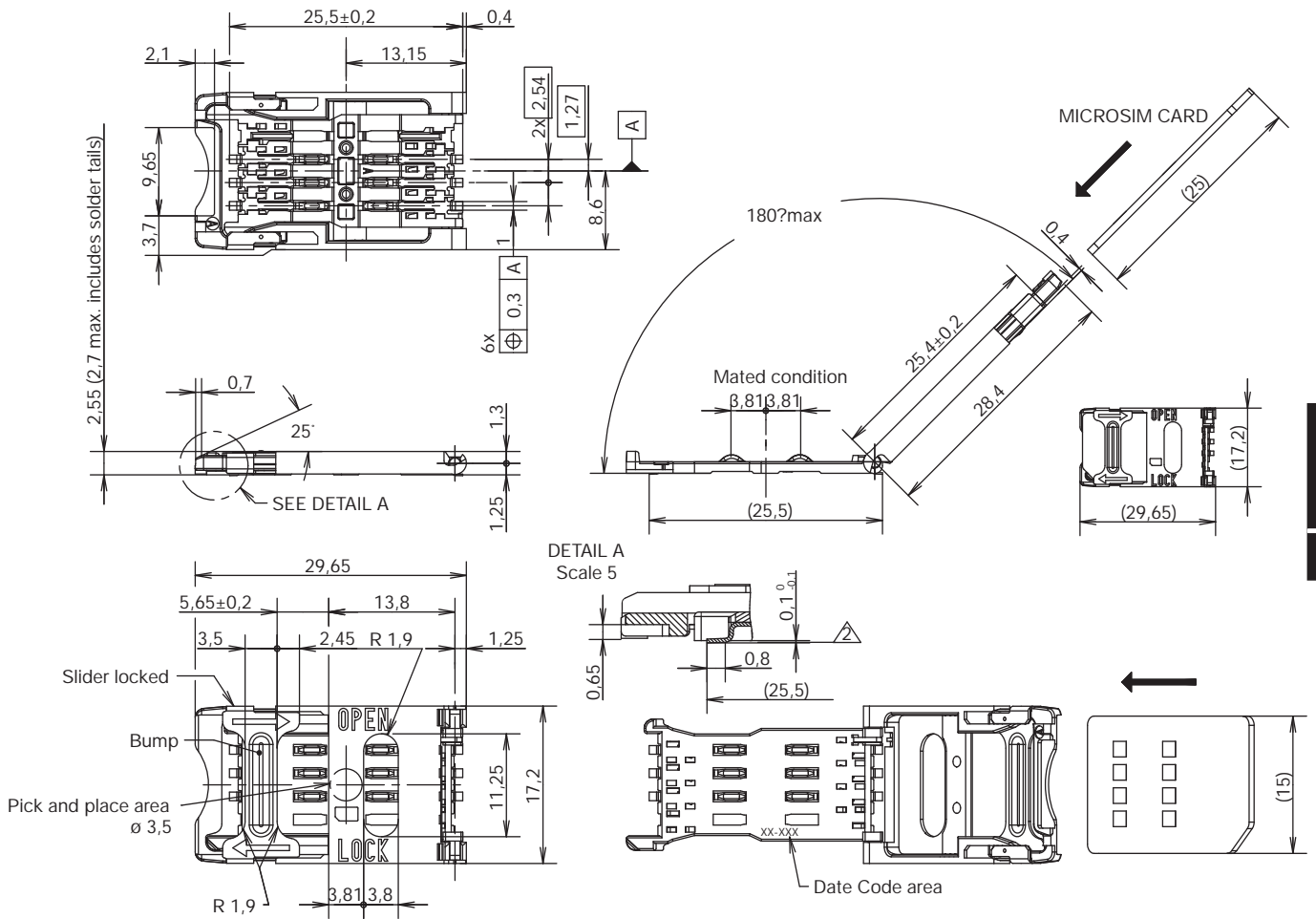
Insulation resistance	1,000 MΩ min
Resistance	100 mΩ max
Current rating	10 µA min / 1 A max
Dielectric strength	750 Vrms min

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

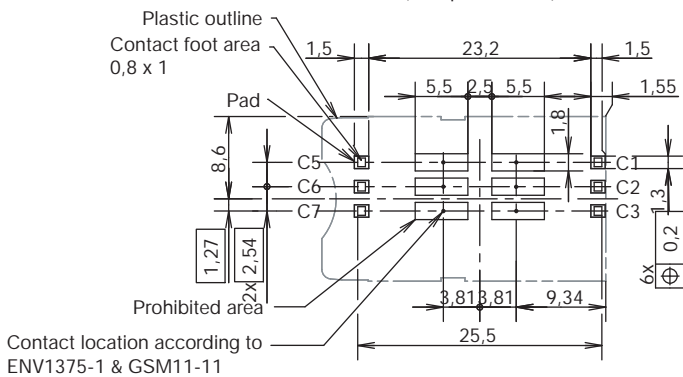
\* Can go through reflow upside down

# CCM03 MK2 Series

CCM03-3001 LFT / CCM03-3009 LFT



RECOMMENDED PC BOARD LAYOUT  
(Component side)



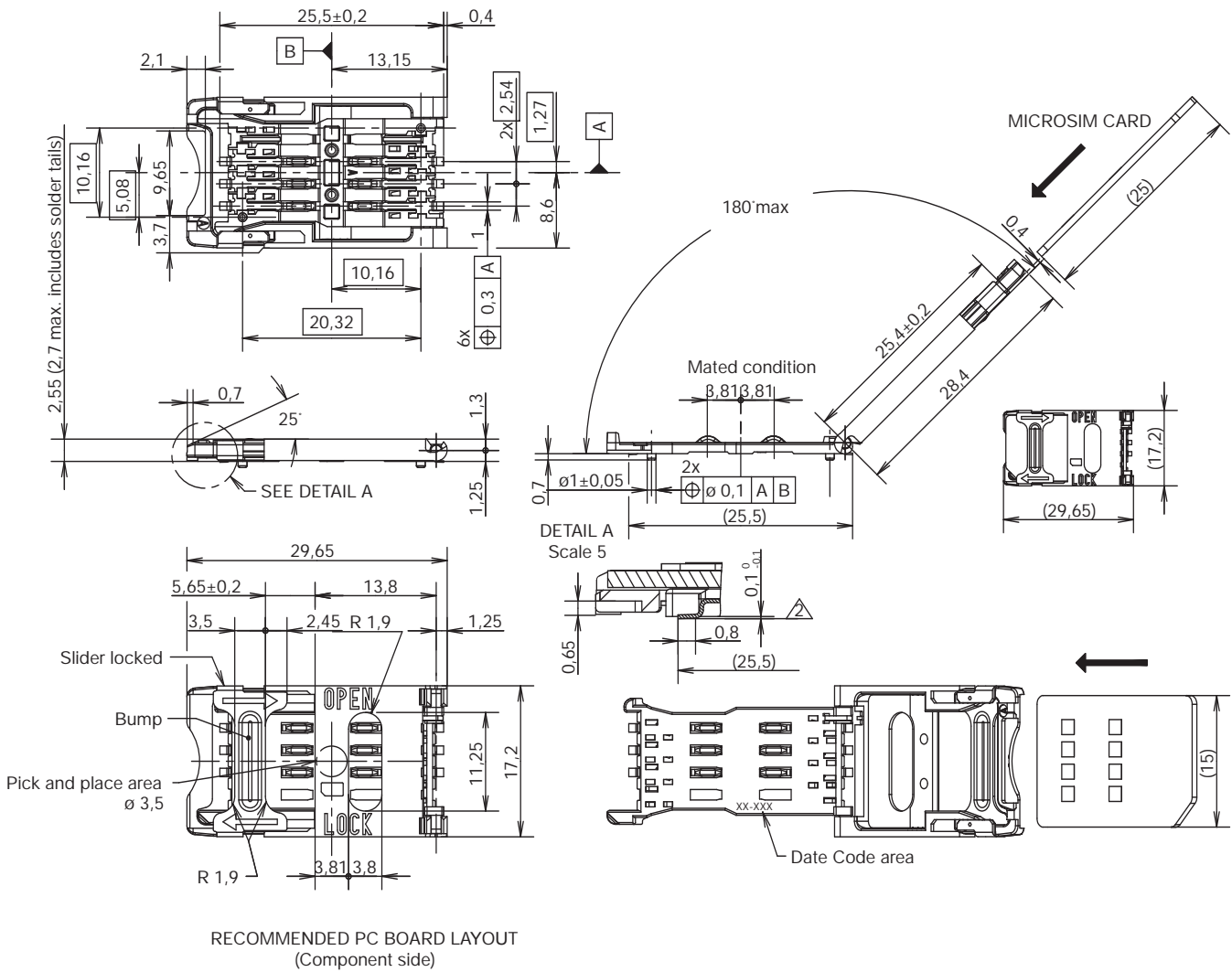
Dimensions are shown in mm  
Specifications and dimensions subject to change

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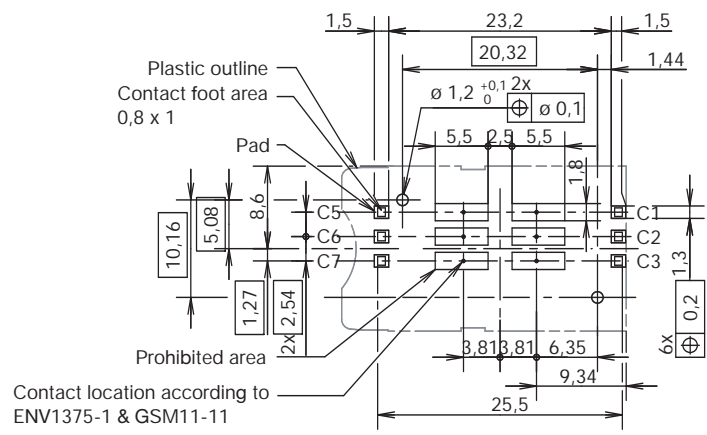
# CCM03 MK2 Series

## CCM03-3002 LFT / CCM03-3010 LFT

SIM/SAM



RECOMMENDED PC BOARD LAYOUT (Component side)

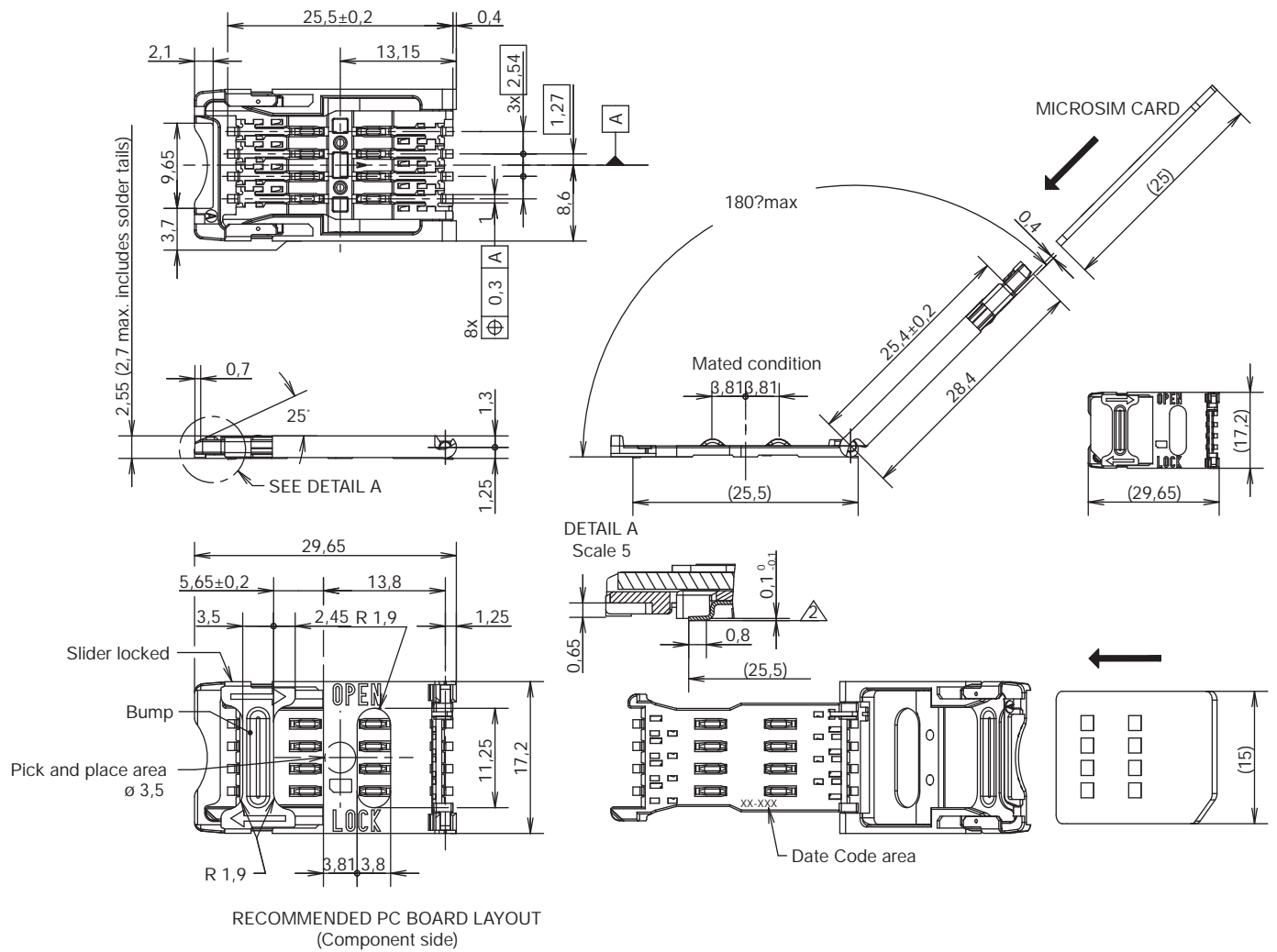


Dimensions are shown in mm  
Specifications and dimensions subject to change



# CCM03 MK2 Series

## CCM03-3003 LFT



SIM/SAM

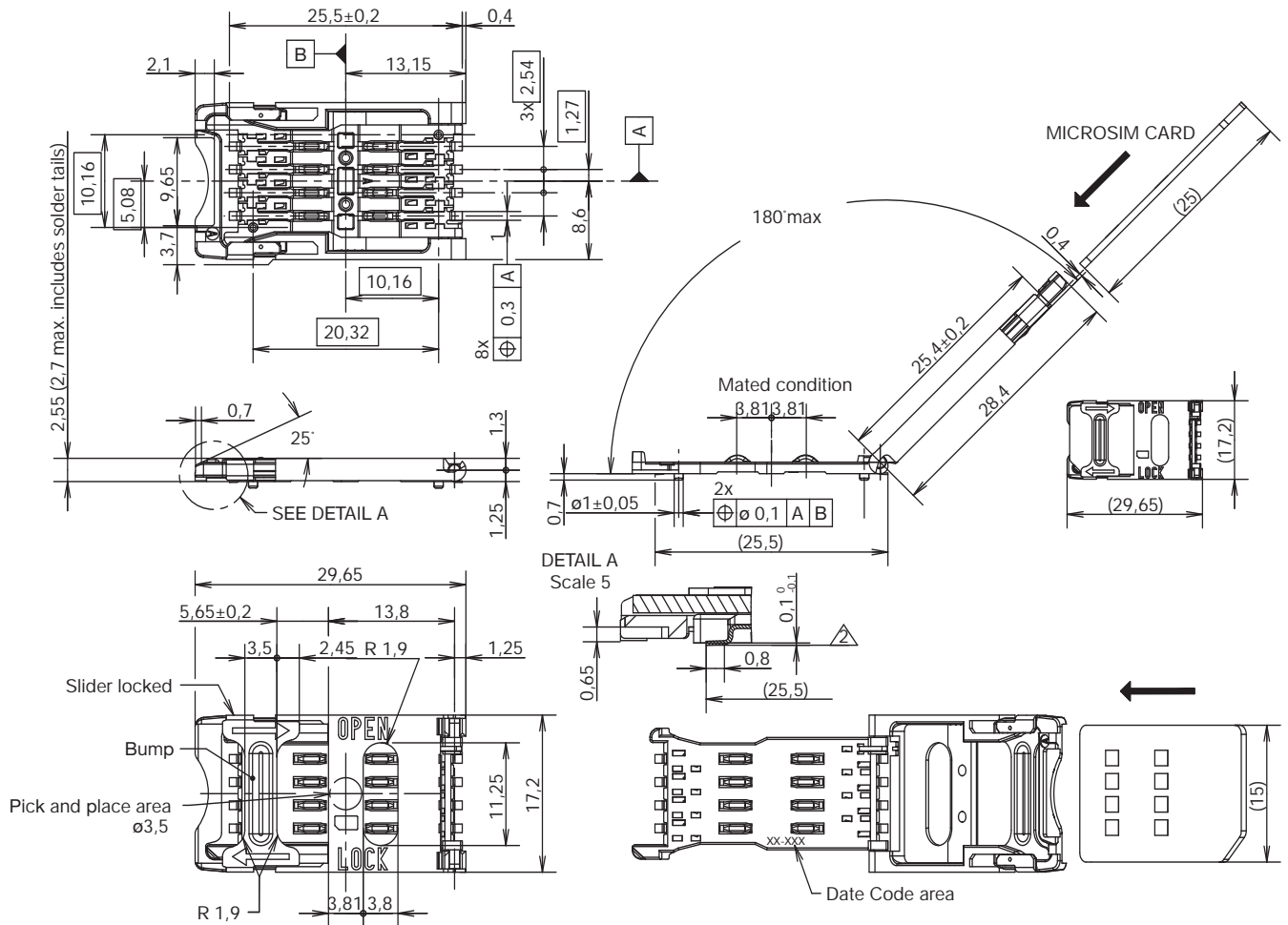


Dimensions are shown in mm  
Specifications and dimensions subject to change

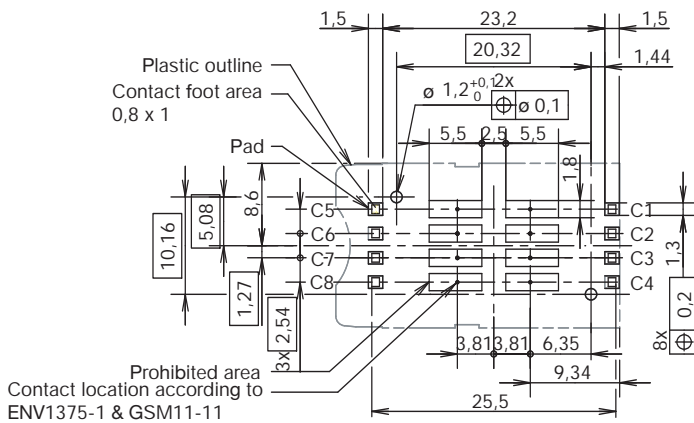
www.ck-components.com

# 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

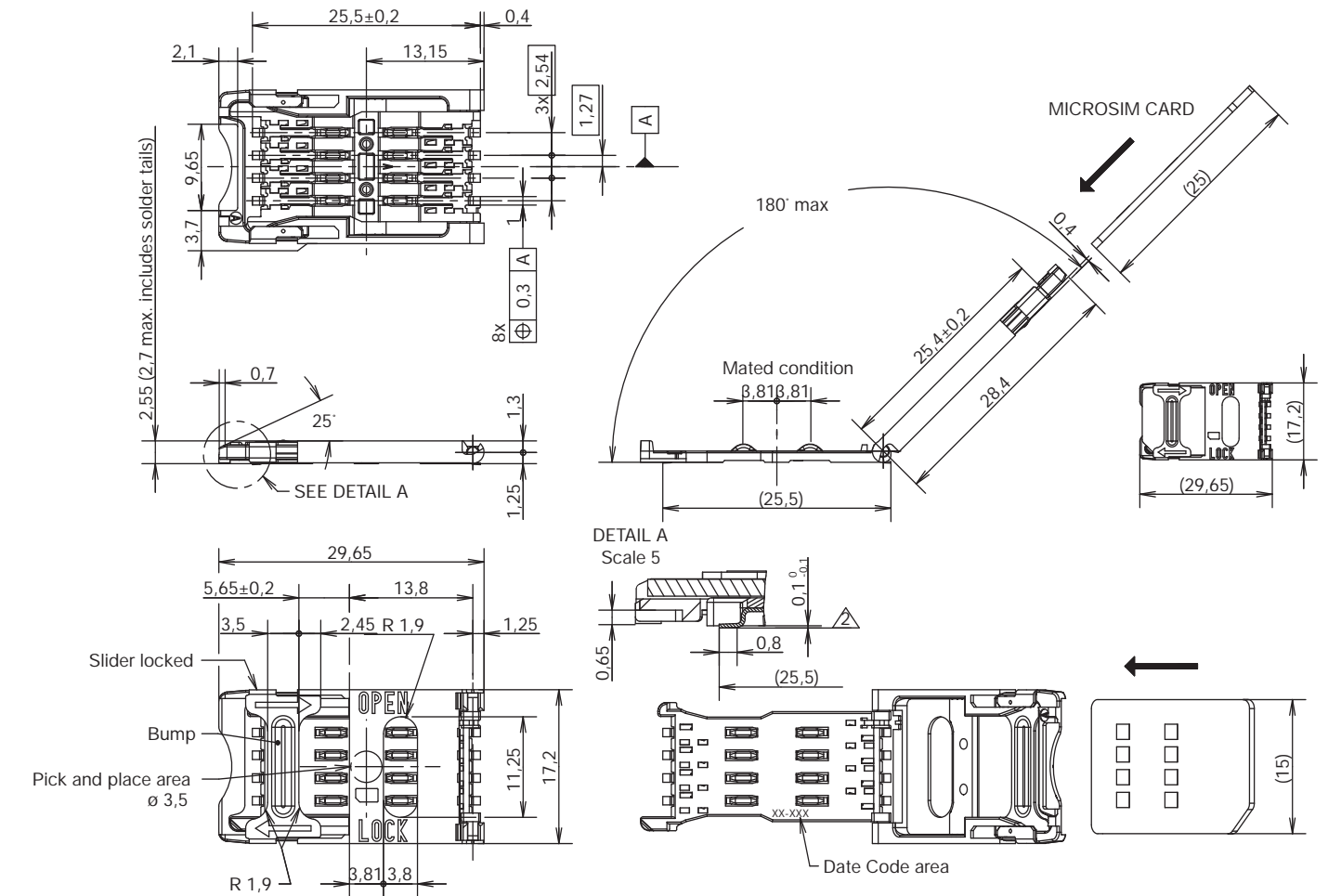
www.ck-components.com

SIM/SAM

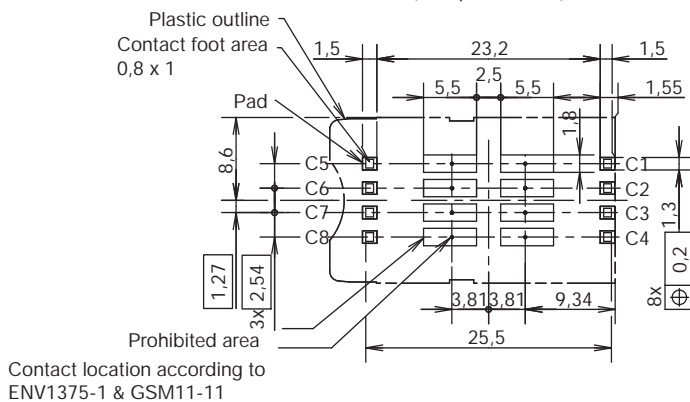


# CCM03 MK2 Series

## CCM03-3011 LFT

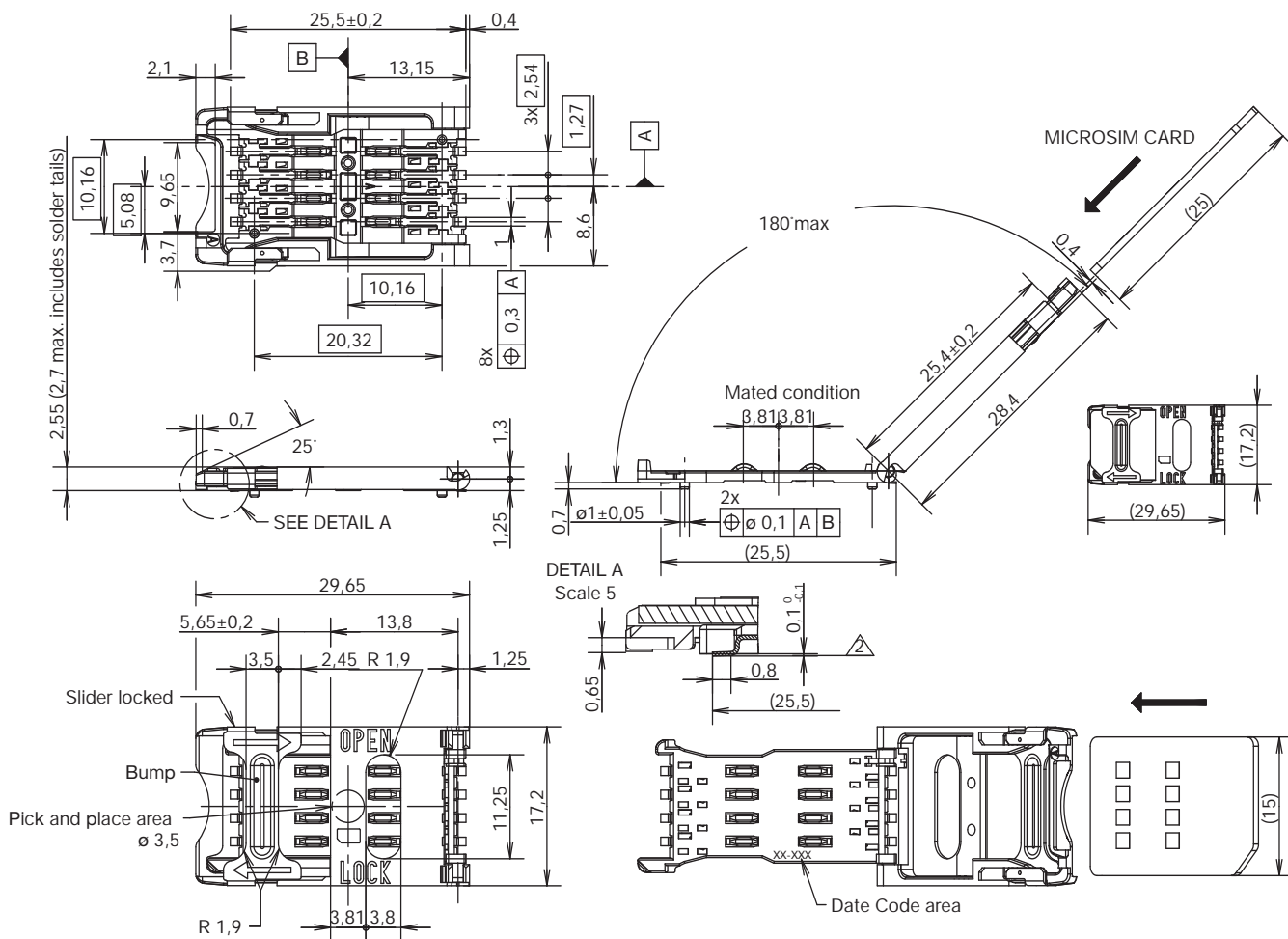


### RECOMMENDED PC BOARD LAYOUT (Component side)

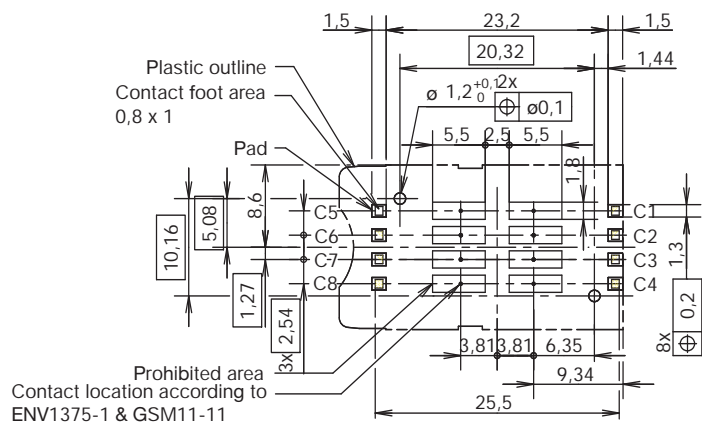


# CCM03 MK2 Series

CCM03-3012 LFT



RECOMMENDED PC BOARD LAYOUT  
(Component side)



SIM/SAM



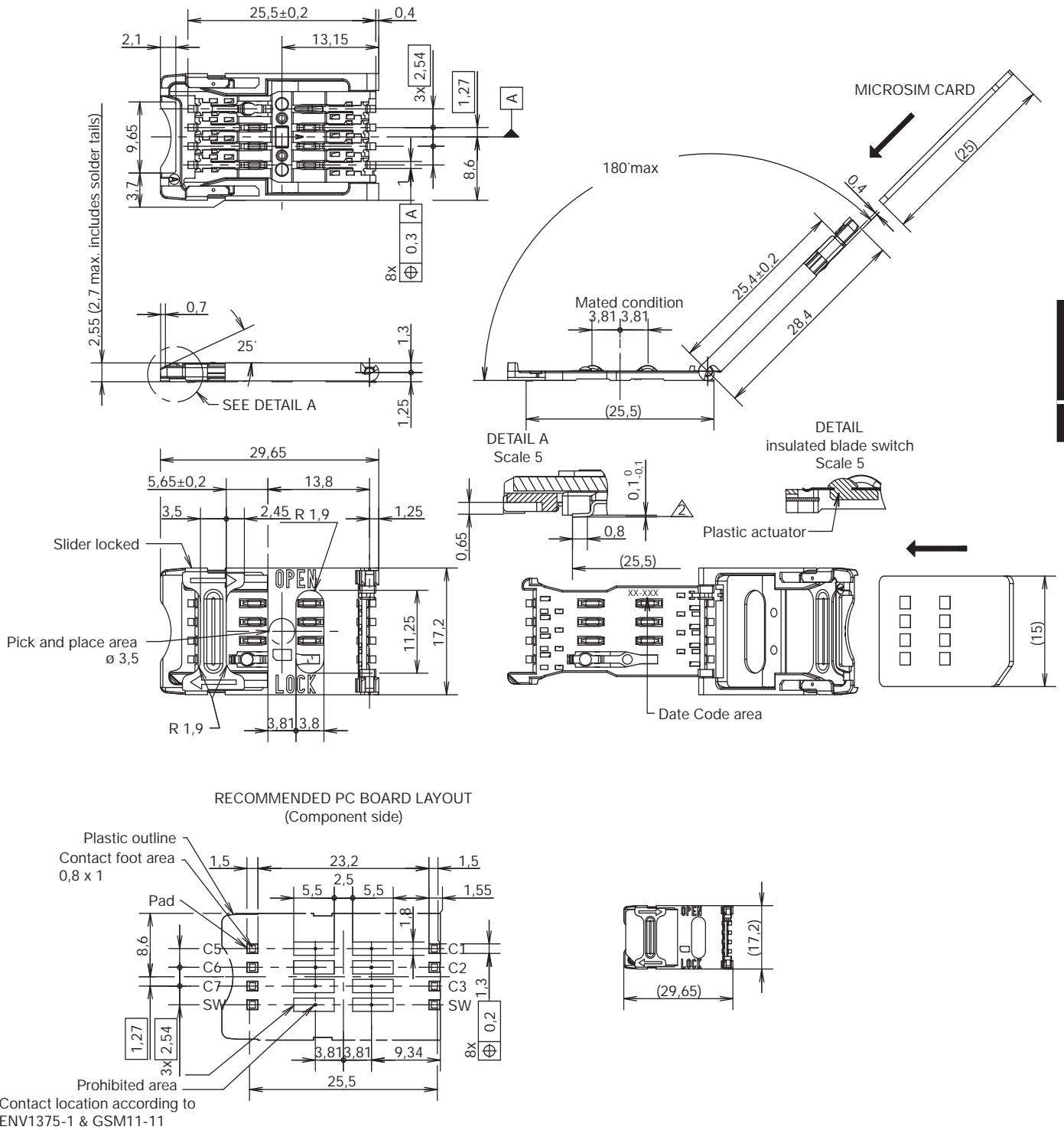
First Angle Projection

Dimensions are shown in mm  
Specifications and dimensions subject to change

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# CCM03 MK2 Series

## CCM03-3013 LFT



SIM/SAM



Dimensions are shown in mm  
Specifications and dimensions subject to change

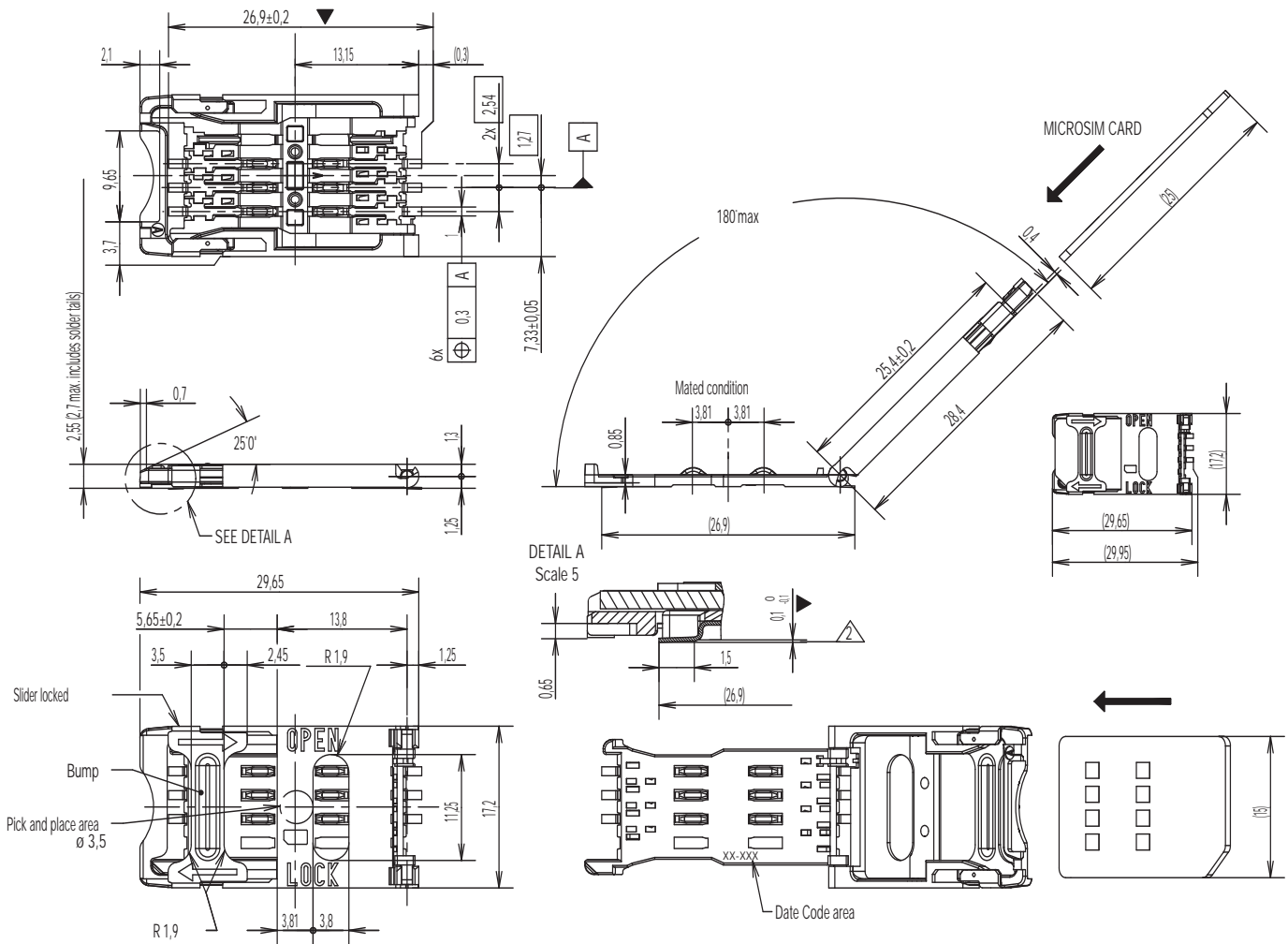
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# CCM03 MK2 Series

CCM03-3512 LFT

SIM/SAM

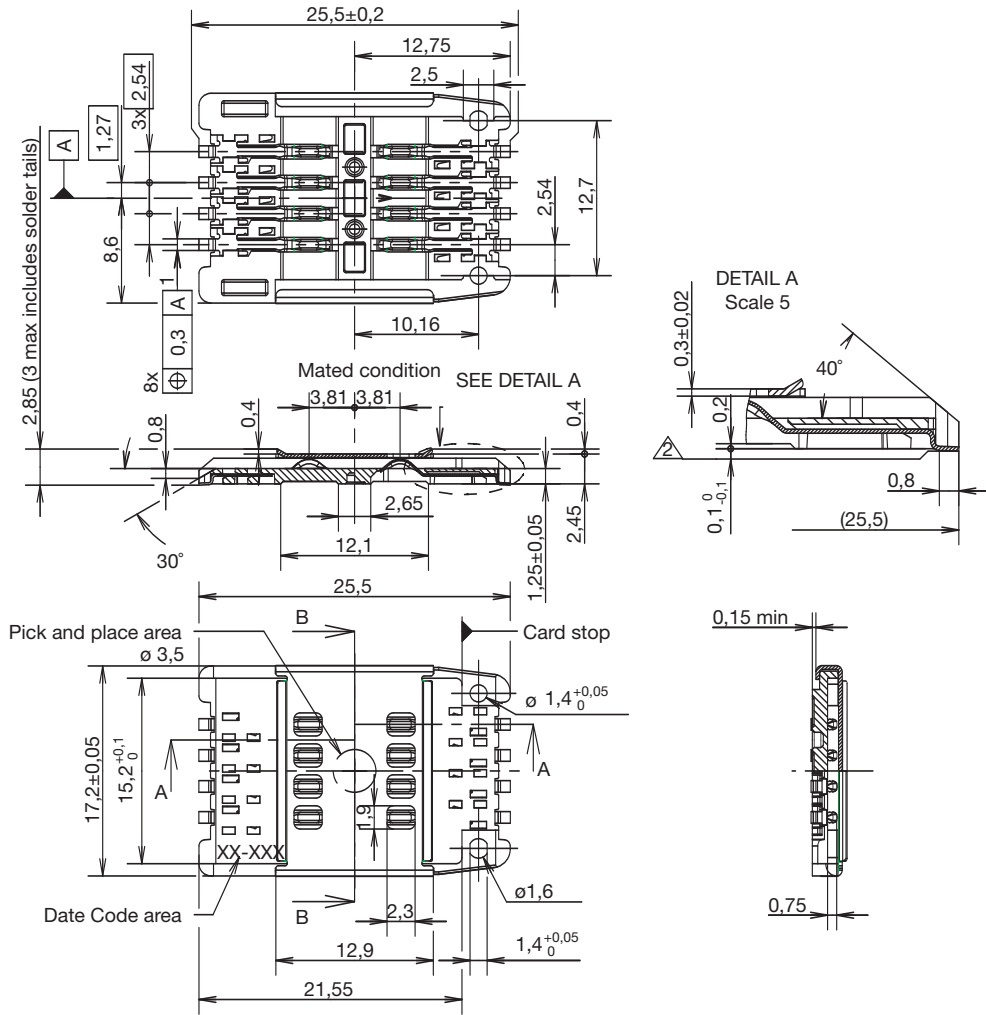


Dimensions are shown in mm  
Specifications and dimensions subject to change

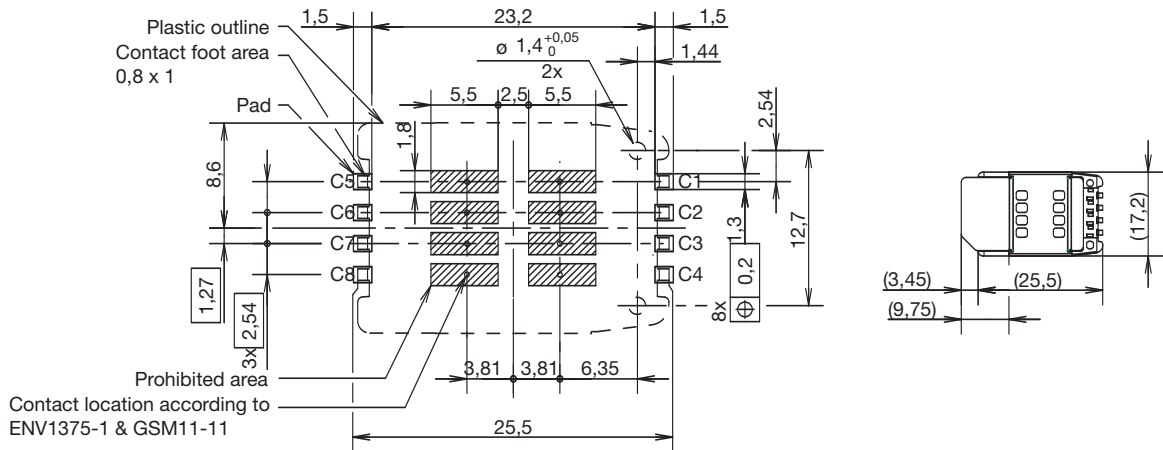
www.ck-components.com

# CCM03 MK2 Series

## CCM03-3504 LFT / CCM03-3505 LFT



RECOMMENDED PC BOARD LAYOUT  
(Component side)

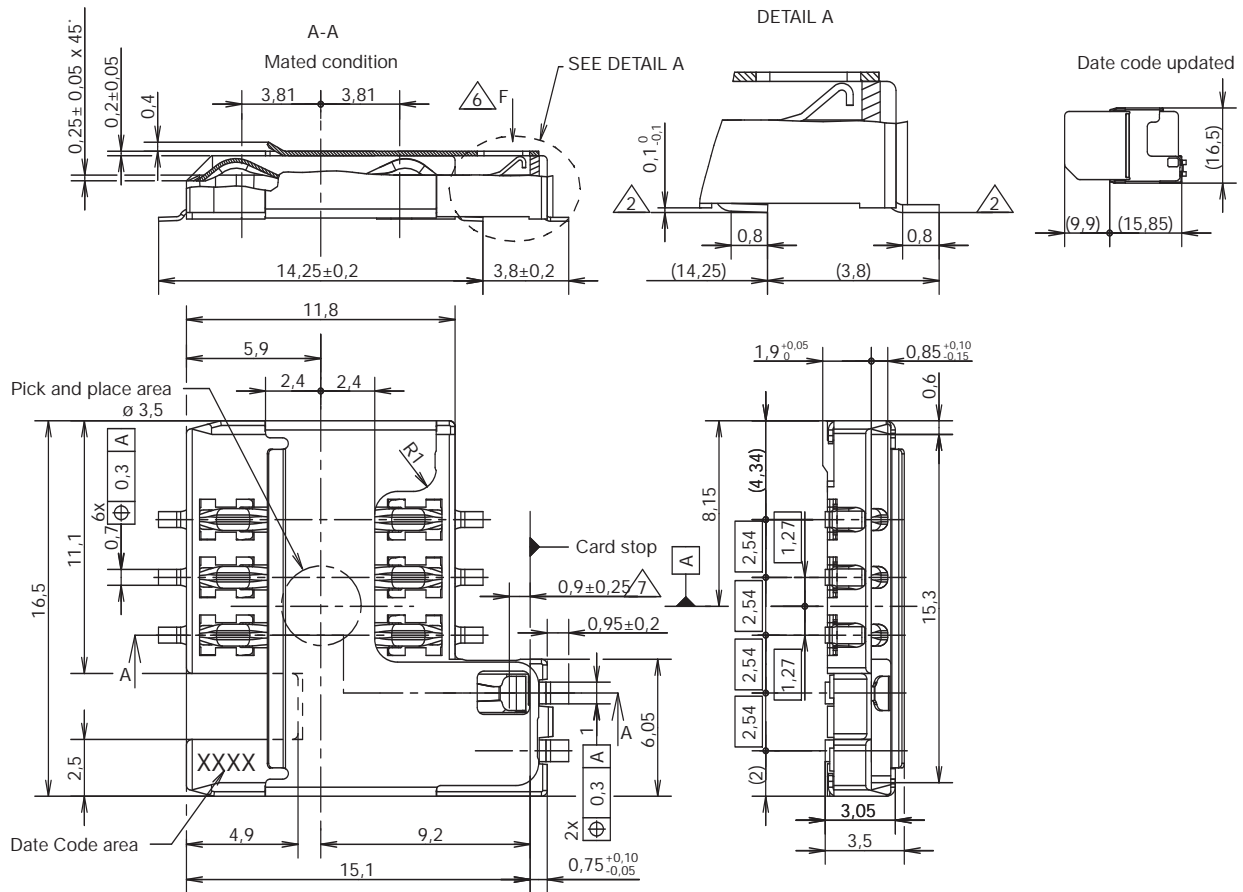


Dimensions are shown in mm  
Specifications and dimensions subject to change

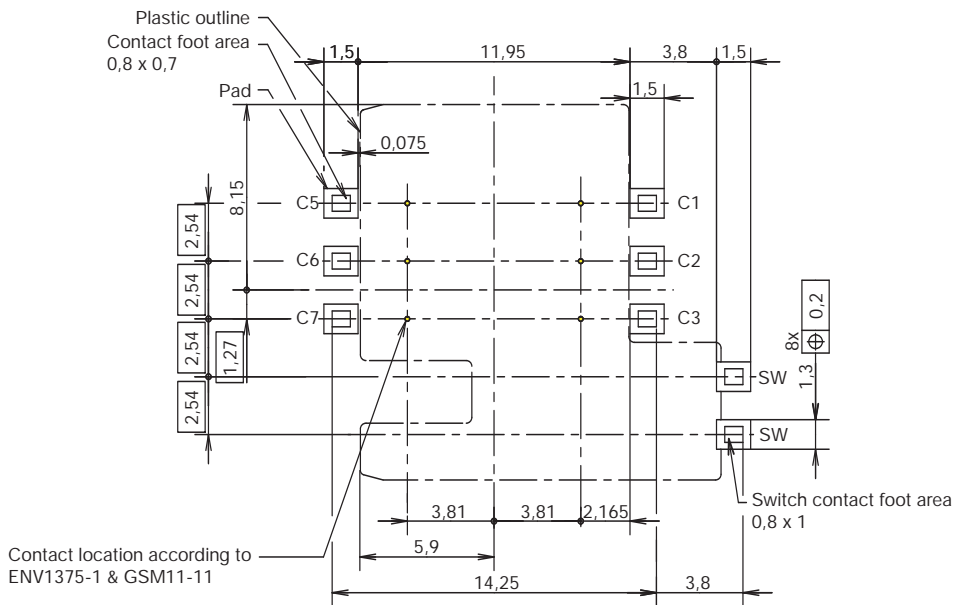
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# CCM03 MK2 Series

## CCM03-3754 LFT



RECOMMENDED PC BOARD LAYOUT  
(Component side)



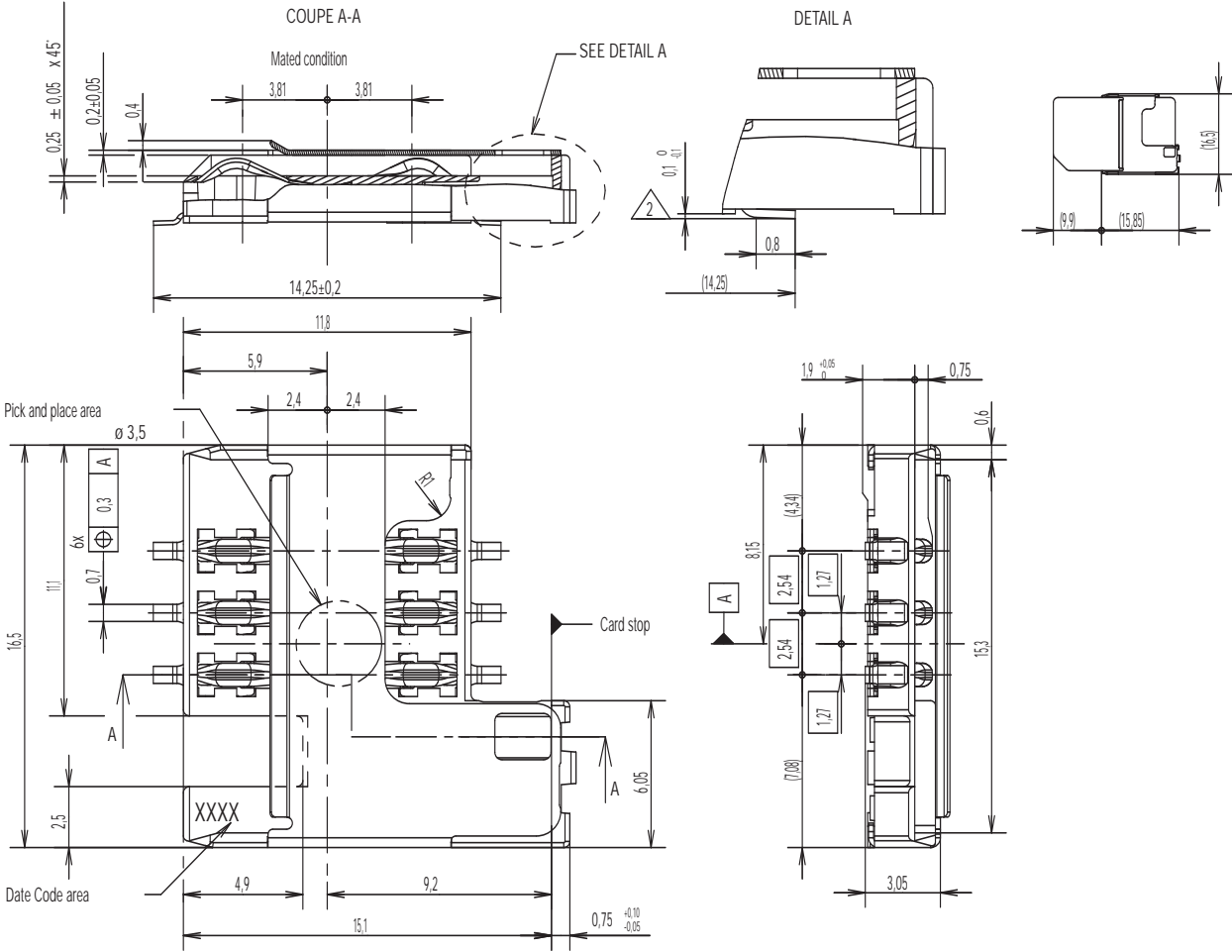
Dimensions are shown in mm  
Specifications and dimensions subject to change

SIM/SAM

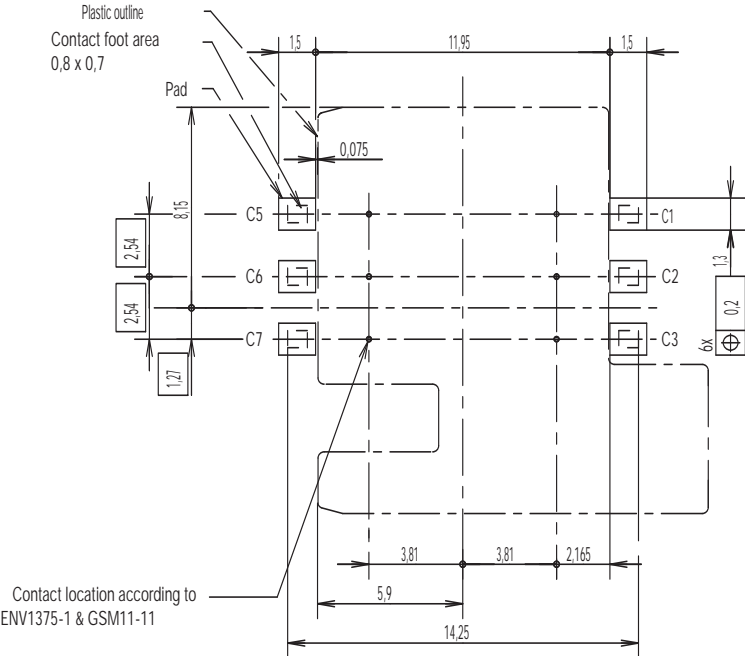


# CCM03 MK2 Series

## CCM03-3760 LFT



RECOMMENDED PC BOARD LAYOUT  
(Component side)



SIM/SAM

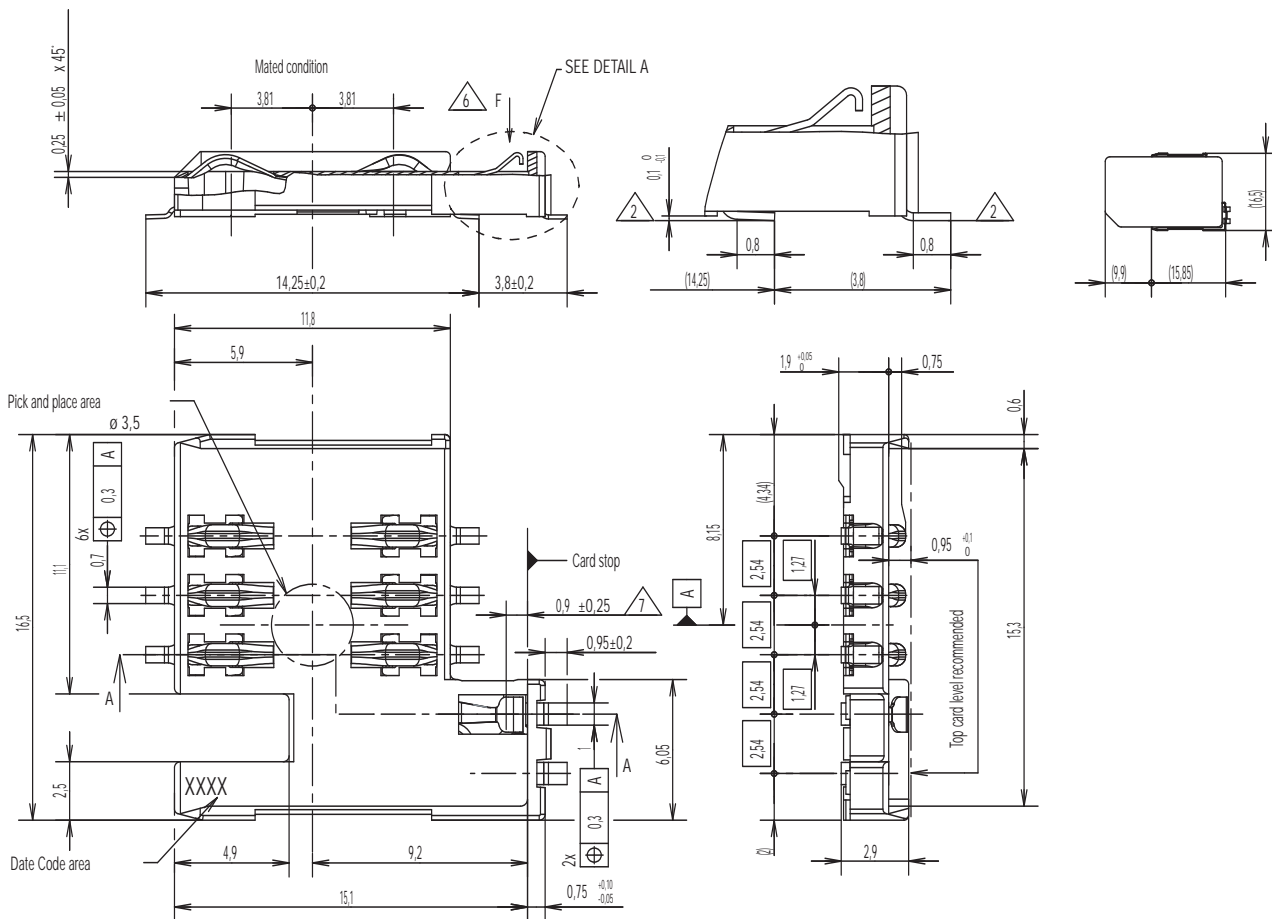
First Angle Projection

Dimensions are shown in mm  
Specifications and dimensions subject to change

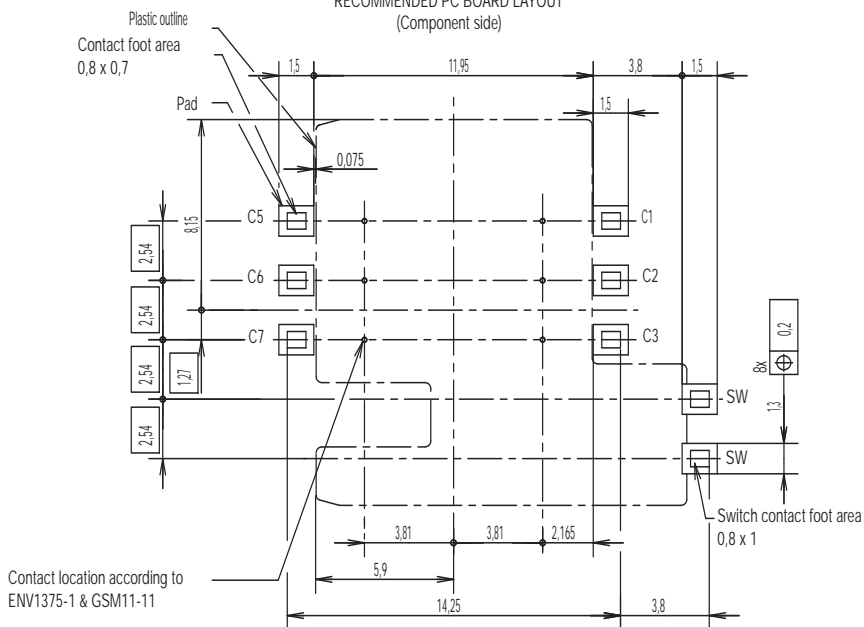


# CCM03 MK2 Series

CCM03-3764 LFT



RECOMMENDED PC BOARD LAYOUT  
(Component side)



Contact location according to  
ENV1375-1 & GSM11-11



First Angle  
Projection

Dimensions are shown in mm  
Specifications and dimensions subject to change

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SIM/SAM



# 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 <sup>2</sup> Duration 6 hours - amplitude 0,35mm
Shock	Peak value 500 m/s <sup>2</sup> – 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

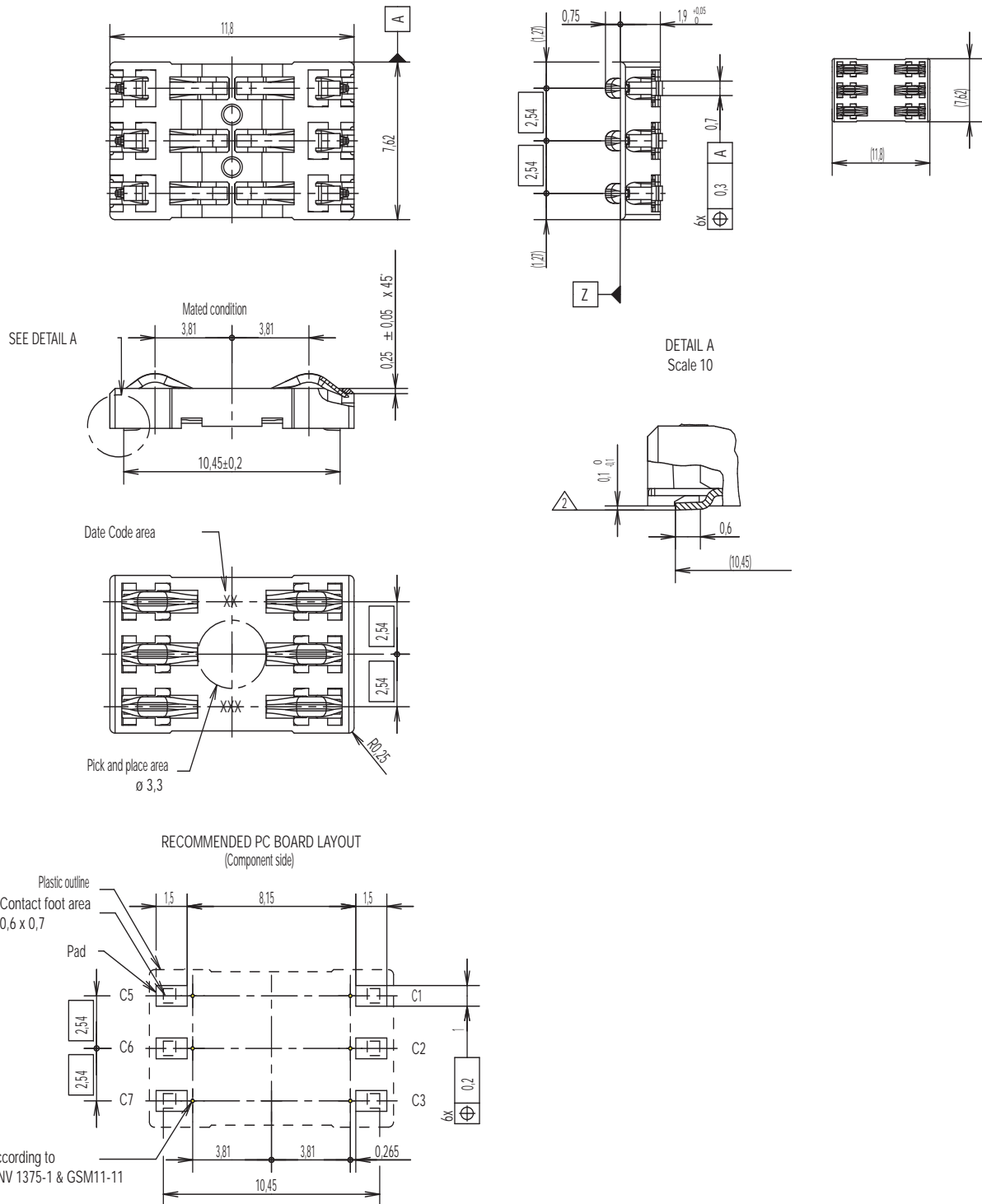
Operating temperature	-40°C to +85°C
Salt mist	IEC 512 test number 11f (96 hours)
Damp heat	IEC 512 test number 11c (10 days)
RoHS compliant	

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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