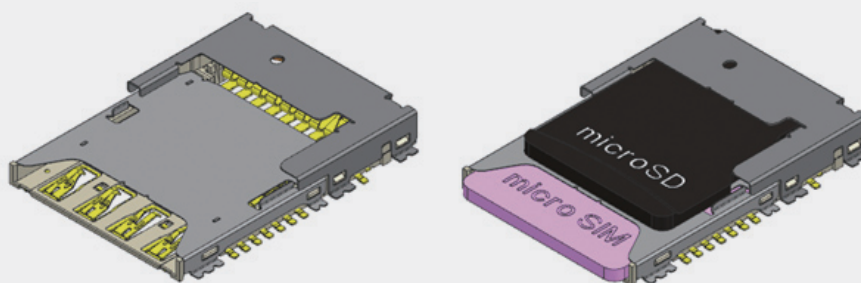


SIM and Memory Card Socket Connector

UCS2

Applications | Mobile phone, Computer, Laptop, Medical equipment, Video recorder, Smart Car



- ▶ Micro-SIM / Micro-SD Combo Socket
- ▶ SD & SIM Terminal deformation prevention structure
- ▶ Switch OFF-ON Structure

Specifications

Current Rating	Contact Resistance	Insulation Resistance	Dielectric Strength	Temperature Range
0.5A/Pin	80mΩ [Max.]	1,000MΩ [Min.]	AC 500V	-40°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGTH	CODE
17	1.10	18.27	2.28	14.10	DS110-C17B-C23-A

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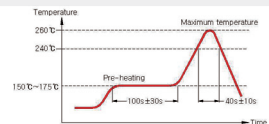
Product Specification

Ratings	Rated current	0.5A/Pin	Operating temperature range	-40°C to +85°C 1	Storage temperature range	-5°C to +40 °C (With packing)
	Rated voltage	Max 10V AC(RMS) or DC	Operating humidity range	10% to 80% RH 2	Storage humidity range	65%RH

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	1) Micro-SD : 80mΩ [Max.] 2) Micro-SIM : 80mΩ [Max.] 3) Switch : 160mΩ [Max.]	- Open circuit voltage: 20mV. - Test current: 10mA.
2. Insulation resistance	1,000MΩ [Min.]	- Test voltage: 500V d.c. - Test time: 1 minute ± 5 seconds.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 500V for 1minute
4. Card insert & Withdrawal force	1) Insertion Force : 1.0kgf [Max.] 2) Withdrawal Force: 1.0kgf [Max.]	Insert the tray at a rate of 25±3 mm/min. (actual card used)
5. Terminal Retention force (Vertical direction)	0.12kgf [Min.] / Pin	Apply perpendicular pull out force at the speed rate if 25±3 mm/min.
6. Durability	- No defect such as remarkable abrasion, breakage or crack on the component. - MAX. Change from Initial contact resistance 40mΩ MAX.	Repeat insert and withdrawal Card with 4~10 cycles/min speed 1) micro-SIM : 5,000 cycles 2) micro-SD : 10,000 cycles
7. Vibration	Discontinuity : 1.0 microsec. MAX.	- Vibration frequency range : 10~55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz / Approx 1min. - Duration : 2h each (6h in total)
8. Shock resistance	Discontinuity : 1.0 microsec. MAX.	- Acceleration : 50G (490%) - Duration : 11ms - Number of shocks : 3 both axial directions, 3 times each, 18 times in total - Test voltage : 5V d.c. - Test current : 1mA d.c.
9. Humidity	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
10. Temperature cycle	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- 55±3(°C) : 30 minutes → - 85±2(°C) : 30 minutes, 5 cycles
11. Solder heat resistance	- No have something wrong of push functions. - No have deformation and fall off. - No have something wrong outward appearance and structure.	Reflow condition. (Refer to Reflow)



Materials / Finish

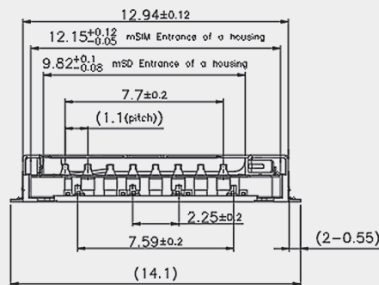
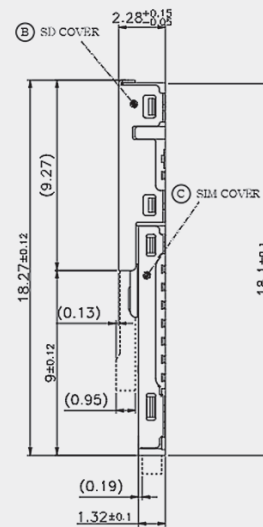
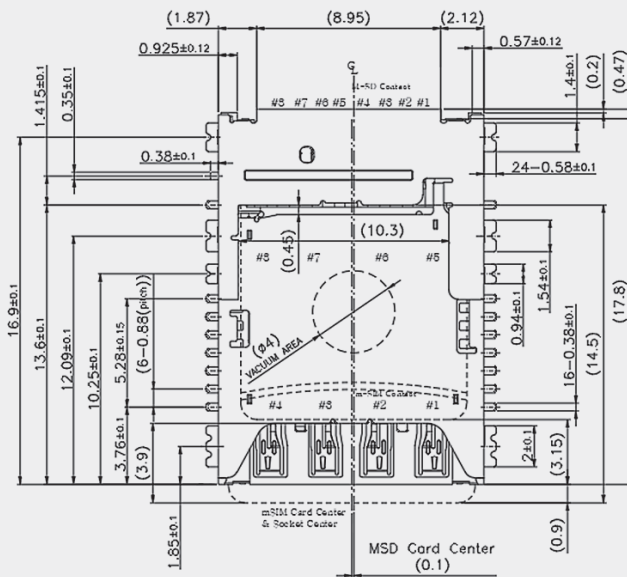
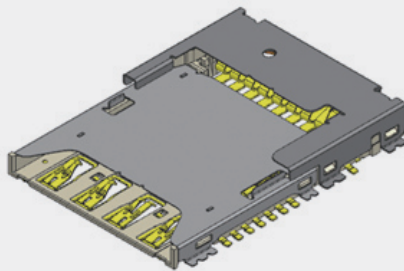
Part	Materials	Finish	UL Regulation
Base	LCP	Natural	UL94V-0
SIM Cover	Stainless Steel	All Ni plated	-
SD Cover	Stainless Steel	All Ni plated	-
Contact Terminal	Copper Alloy	Au - Ni plated	-
Switch Terminal	Phosphor Bronze	Au - Ni plated	-

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Product Drawing

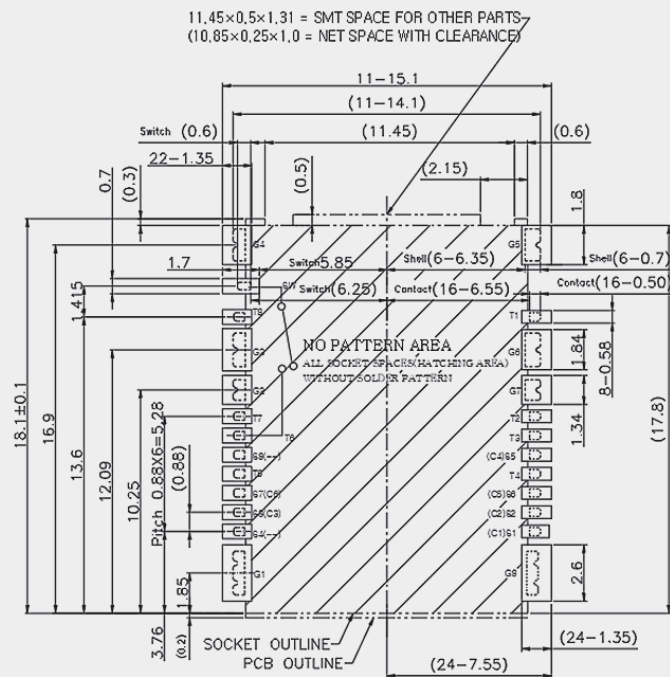


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Recommended PCB Dimensions



RECOMMENDED PCB LAYOUT [FRONT VIEW]
(TOLERANCE : ±0.05)
(RECOMMEND METAL MASK T=0.10mm)

[micro SIM CARD PIN-MAP]

8P	6P	DESCRIPTION
S1	C1	VCC(Supply v)
S2	C2	RST(Reset)
S3	C3	CLK(Clock)
S4	--	Reserved
S5	C4	GND
S6	C5	Vpp(Program)
S7	C6	Vpp(Program)
S8	--	Reserved
G1-G8		GND

[micro SD CARD PIN-MAP]

PIN NO.	DESCRIPTION
T1	DAT 2
T2	CD/DAT 3
T3	CMD
T4	VDD
T5	CLK
T6	VSS (GND)
T7	DAT 0
T8	DAT 1
S/W	CARD DETECTOR

[Circuit diagram for Detection Switch of micro-SD card]

Card insertion condition	Card detect switch	Circuit mSD #6pin Switch terminal
Without Card	Open	
Card insertion	Close	