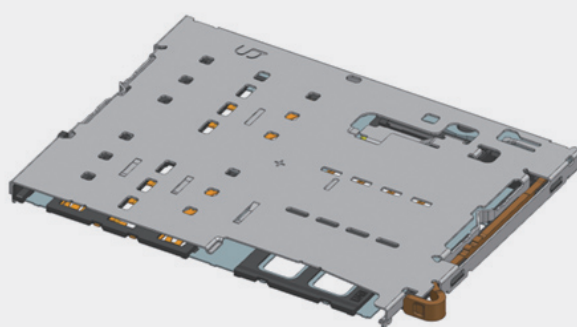


SIM and Memory Card Socket Connector

S02

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



- ▶ 3in3 Mold Tray Socket
- ▶ SD & SIM Terminal deformation prevention structure
- ▶ TRAY reverse insertion prevention structure
- ▶ Switch OFF - ON Structure
- ▶ All-in-one Cover & Latch

Specifications

Current Rating	Contact Resistance	Insulation Resistance	Dielectric Strength	Temperature Range
0.5A/Pin	100mΩ [Max.]	1,000MΩ [Min.]	AC 500V	-40°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGHT	CODE
20	2.54	21.50	1.40	30.28	TS254-C20B-C23

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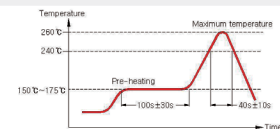
Product Specification

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	100mΩ [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. Tray insert force	1,000gf [Max.]	Insert the tray at a rate of 25±3 mm/min. (actual card used)
5. Rod withdrawal force	400~1200gf	- Press Rod with a pin. (Speed 25 mm/min) - Measure the force at the third time when the actual use card is mounted.
6. Durability	1) Check whether the SIM card terminal surface is split and the card terminal is short. 2) contact resistance - Max 100mΩ 3) Pin removal force (2,000 times) - 400~1200gf	1) Attach and detach 500 times. 2) Attach and detach 2,000 times. 3) Reattach the 0.7T SD/SIM card tested in Sample No.2 and attach/detach an additional 3,000 times
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 Humidity : 90% ~ 95% Duration : 96hr
10. Temperature cycle	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- 40±3(°C) : 30 minutes → 85±2(°C) : 30 minutes, 96 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 A	LCP	Black	UL94V-0
Terminal	Copper Alloy	Au-Pd , Ni plated	-
Cover	Stainless Steel	Au, Ni plated	-
Eject Rod	Stainless Steel	-	-
Lever	Stainless Steel	-	-

SIM and Memory Card Socket Connector

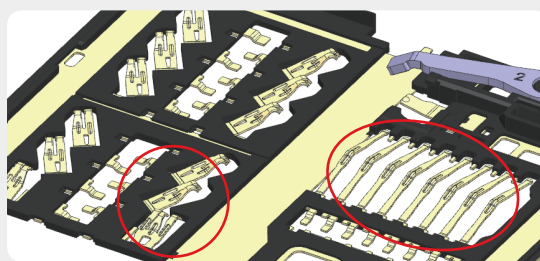
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FEATURES AND ADVANTAGES

▶ SIM & SD Terminal deformation prevention structure

- Strengthen contact stability
- Improving product quality reliability

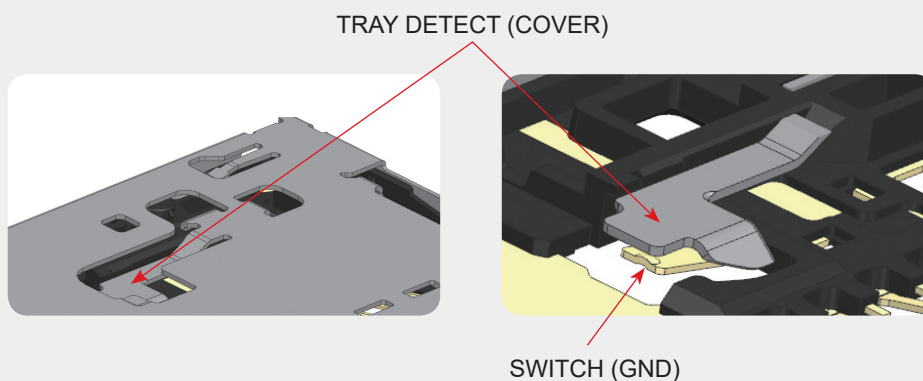


SIM CONTACT

micro SD CONTACT

▶ Switch y-axis ON-OFF structure

- Normal [CLOSE] → Tray inserted [OPEN]
- Strengthen contact stability
- Improving product quality reliability



TRAY DETECT (COVER)

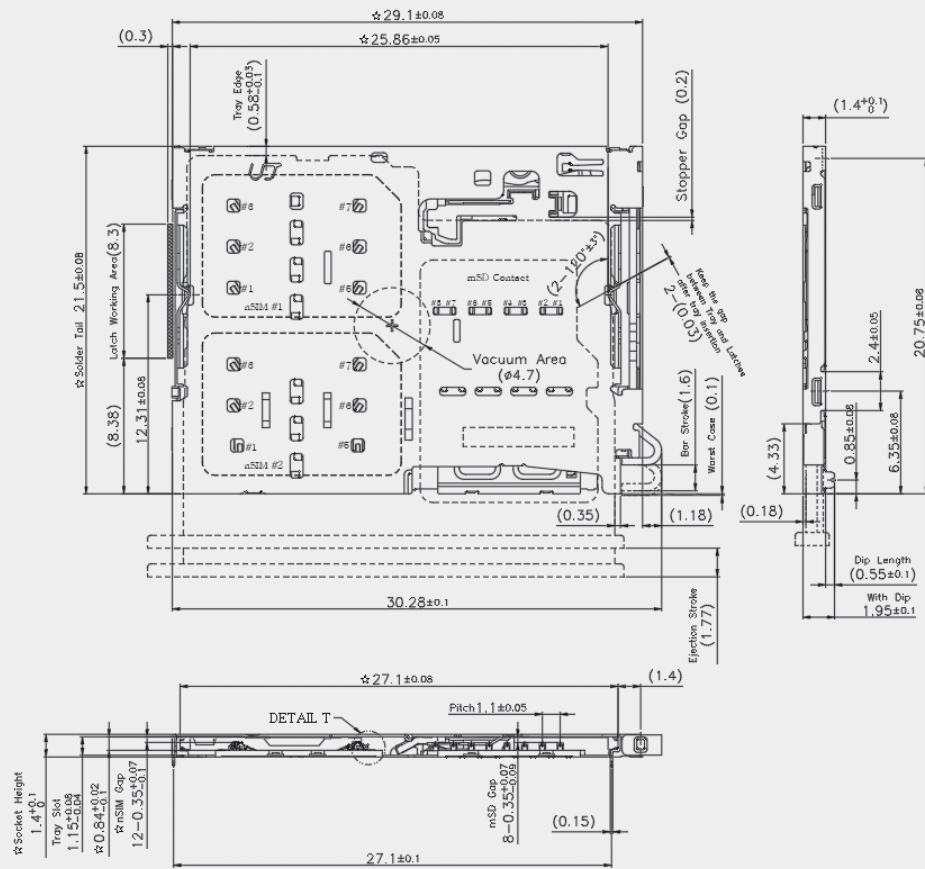
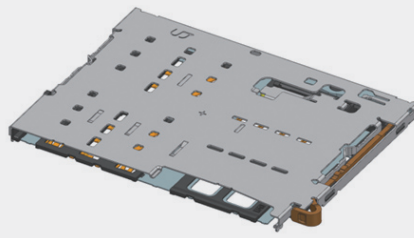
SWITCH (GND)

SIM and Memory Card Socket Connector

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Product Drawing

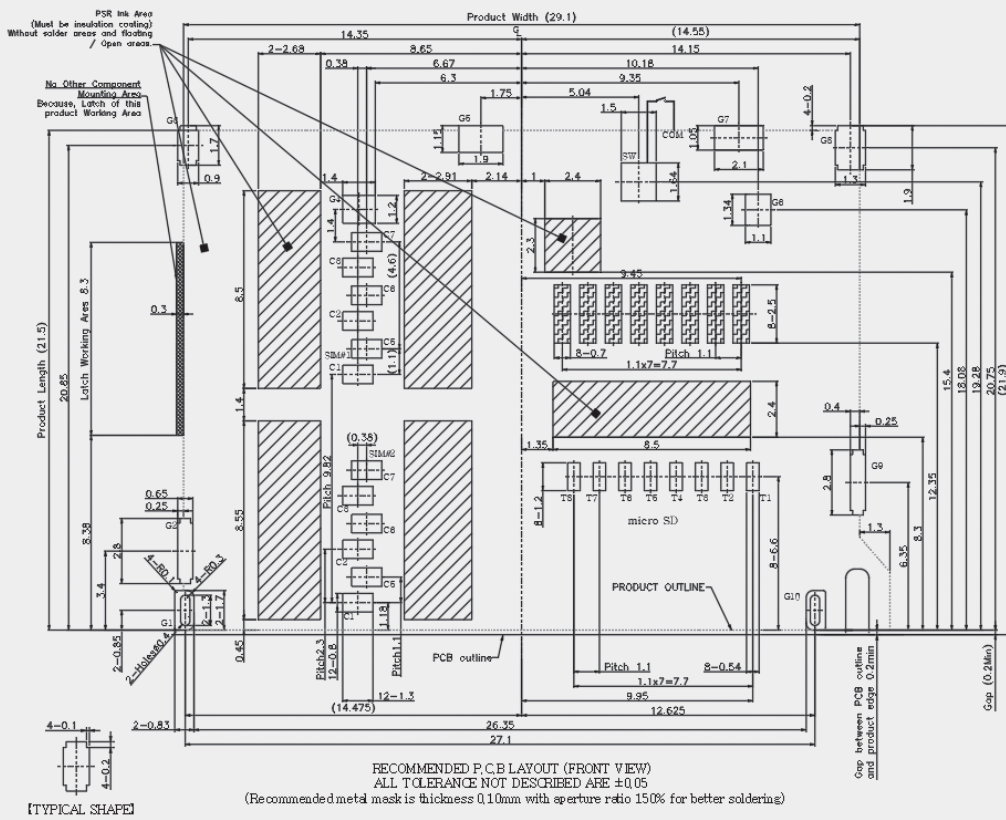


SIM and Memory Card Socket Connector

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Recommended PCB Dimensions



[TYPICAL SHAPE]

- Not connect (Peel cover layer/Open)
 Tips of micro-SD contact terminals are always sliding on PCB when mSD card inserted.
 So, it is possible to make scratches on the PCB.
- Hatching areas are pattern prohibition (No Via / No Trace)
 Because of contact terminals are touchable

[MANO SIM CARD PIN-MAP]

Pin No.	Description
C1	VCC (Supply V)
C2	RST (Reset)
C3	CLK (Clock)
(C4)	(None)
C5	GND (Ground)
C6	VPP (Program V)
C7	I/O
(C8)	(None)

This product has no C4,C8 contact terminal.
 (이 제품은 C4,C8 접촉단자가 없음.)

[micro SD CARD PIN-MAP]

Pin No.	Description
T1	DAT2
T2	CD/DAT6*
T3	CMD
T4	VDD
T5	CLK
T6	VSS (GND)
T7	DAT0
T8	DAT1

G1-G10	GROUND
S/W	TRAY DETECTION SWITCH
COM	ALL OF GROUND (G1~G10)

* There is only tray insertion / removal detection switch physically.
 (물리적으로 트레이 삽입/ 제거 감지 스위치만 있음)
 Therefore, After tray detection, (트레이 감지 후)
 This product is necessary to detect the SIM or SD card separately in software.
 (소프트웨어에서 SIM 또는 SD카드를 별도로 감지하기 위해 필요한 제품임.)