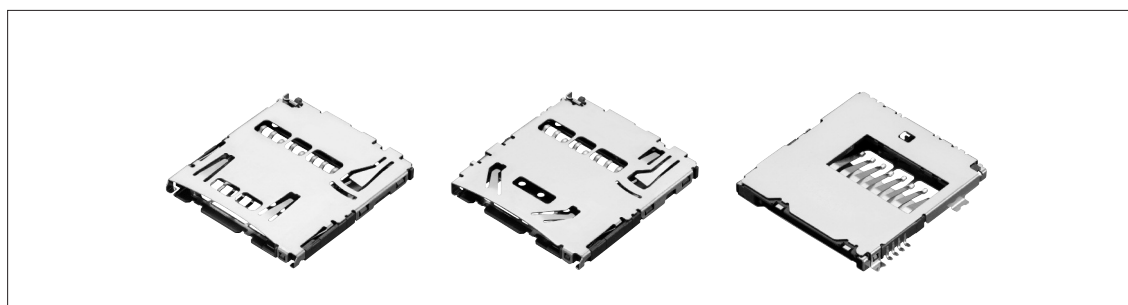


Connector for microSD™ Card (Push-push Type)

SCHA Series



Compact low-profile type most suitable for mobile phones.



For
SD Memory
Card

For
microSD™
Card

For
SIM Card
8pins

For
Memory
Stick Micro™

Combine Type

For
W-SIM

Typical Specifications

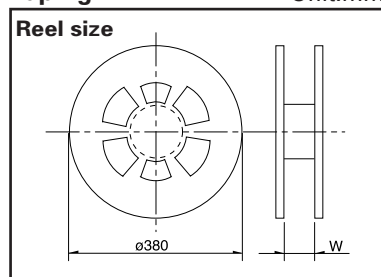
Items		Specifications
Structure	Applicable media	microSD™ Card
	Mounting type	Surface mounting type
	Mounting style	Standard mount/ Reverse mount
	Media ejection structure	Push-push type
Performance	Operating temperature range	−20°C to +70°C
	Voltage proof	500V AC 1minute
	Insulation resistance (Initial)	1,000MΩ min.
	Contact resistance (Initial)	100mΩ max.
	Connector contacts	500mΩ max.
Insertion and removal cycle		10,000cycles

Product Line

Media ejection structure	Mounting system	Features	Stand-off (mm)	Packing system	Product No.	Drawing No.
Push-push type	Standard mount	With switch	0	Taping	SCHA4B0100	1
		With switches and fly-out protection.			SCHA4B0400	2
	Reverse mount	With switch			SCHA5B0200	3

Packing Specifications

Taping Unit:mm



Product No.	Number of packages (pcs.)			Reel width W (mm)	Tape width (mm)	Export package measurements (mm)
	1 reel	1 case /Japan	1 case /export packing			
SCHA4B0100	2,000	6,000	12,000	24.4	24	403 × 403 × 249
SCHA4B0400						
SCHA5B0200	1,500	4,500	9,000			

Note

Please place purchase orders per minimum order unit N (integer).



Automotive
Use

Dimensions
Standard mount

Unit:mm

No.	Style	PC board mounting hole dimensions (Viewed from the mounting face side)																		
1	With switch	<div><div><div><p>Connector center</p><p>15.2</p><p>(0.9)Over stroke</p><p>(2.3)</p><p>(1)</p><p>13.8</p><p>microSD Card center</p><p>(3.3)Eject stroke</p></div><div><p>Card detect switch Common (GND)</p><p>1.29 0.9 0.35 0.35 0.9</p><p>#1 #8</p><p>0.6 10-0.3 0.8</p><p>GND</p><p>(1.17)</p></div><div><p>Circuit Diagram for Detect Switch</p><p>Detect switch Insertion Card=ON Common →Normal=OFF</p><p>Pin assignments</p><table><tr><th>PIN</th><th>SD Mode</th></tr><tr><td>#1</td><td>DAT2</td></tr><tr><td>#2</td><td>DAT3/CD</td></tr><tr><td>#3</td><td>CMD</td></tr><tr><td>#4</td><td>V_{DD}</td></tr><tr><td>#5</td><td>CLK</td></tr><tr><td>#6</td><td>V_{SS}</td></tr><tr><td>#7</td><td>DAT0</td></tr><tr><td>#8</td><td>DAT1</td></tr></table></div></div><div><p>Connector center</p><p>5.325 4.125 3.8 3.15 6.675 5.375 3.2 2.55</p><p>0.25 15.3 14.2 13.9 12.95 12.45 11.4 0.6 7 4.775 7-1 10-0.7 14.4 15.2 0.5 3.275 6.1 13.8 6.1 7.05 7.05 0.725</p><p>#8 #7 #6 #5 #4 #3 #2 #1</p><p>GND</p><p>Pattern Area NO Pattern Area</p></div></div>	PIN	SD Mode	#1	DAT2	#2	DAT3/CD	#3	CMD	#4	V _{DD}	#5	CLK	#6	V _{SS}	#7	DAT0	#8	DAT1
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#8	DAT1																			
2	With switches and fly-out protection.	<div><div><div><p>Connector center</p><p>1.32(1.45 max.)</p><p>12.58 8.35</p><p>15.25</p><p>(0.9)Over stroke</p><p>(2.3)</p><p>(0.9)</p><p>13.825 6.6325 7.0825</p><p>microSD Card center</p><p>(3.3)Eject stroke</p></div><div><p>Card detect switch Common (GND)</p><p>0.9 0.35 0.35 0.9</p><p>#1 #8</p><p>0.6 10-0.3 0.9</p><p>GND</p></div><div><p>Circuit Diagram for Detect Switch</p><p>Detect SW Insertion Card=ON Common →Normal=OFF</p><p>Pin assignments</p><table><tr><th>PIN</th><th>SD Mode</th></tr><tr><td>#1</td><td>DAT2</td></tr><tr><td>#2</td><td>DAT3/CD</td></tr><tr><td>#3</td><td>CMD</td></tr><tr><td>#4</td><td>V_{DD}</td></tr><tr><td>#5</td><td>CLK</td></tr><tr><td>#6</td><td>V_{SS}</td></tr><tr><td>#7</td><td>DAT0</td></tr><tr><td>#8</td><td>DAT1</td></tr></table></div></div><div><p>6.0125 5.3125 4.1125 3.8 3.15 2.5125 1.4675 6.6625 5.3625 3.2 2.55</p><p>0.25 15.35 14.2 13.6 12.95 12.68 12.45 11.7 8.05 0.6 2.8875 7-1 10.15 1.0375 10-0.7 14.4 15.2 8.55 4.15 2.4 0.5 3.275 6.0875 6.8325 13.825 7.3325 7.05 0.725</p><p>#8 #7 #6 #5 #4 #3 #2 #1</p><p>GND</p><p>Pattern area No pattern exposed area No pattern area</p></div></div>	PIN	SD Mode	#1	DAT2	#2	DAT3/CD	#3	CMD	#4	V _{DD}	#5	CLK	#6	V _{SS}	#7	DAT0	#8	DAT1
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For
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Combine Type

For
W-SIM



Automotive
Use

Unit:mm

No.

Style

PC board mounting hole dimensions
(Viewed from the mounting face side)

3

Slim type with switch

Connector center
microSD
Card center

(0.875)

(0.9) Over stroke

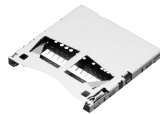





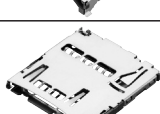






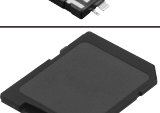

(2.6)

(3.3) Elect stroke

For
W-SIM

Automotive
Use

List of Varieties

Applicable media	Product No.	Photo	Media ejection structure	Mounting style	Features	Stand-off (mm)	Auto motive use	Page
SD Memory Card Multi-MediaCard™	SCDA9A0400		Push-push type	Standard mount	Inner tail Card eject stroke 5mm	0	—	527
	SCDA8A0201				Inner tail Card eject stroke 8mm			
	SCDA7A0101				Card eject stroke 8mm	1.5	○	
	SCDA7A0200							
	SCDA7A1201			1.8				
	SCDAAA0100			Reverse mount	Outer tail	0	—	
	SCDAAA0601					1.8		
microSD™ Card	SCHA4B0100			Standard mount	With switch	0	○	532
	SCHA4B0400				With switches and fly-out protection.		—	
	SCHA5B0200			Reverse mount	With switch		○	
	SCHB1A0205		Manual insertion/removal	Standard mount	Hinge cover type Without switch	0	—	535
	SCHB1B0100				Hinge cover type With switch			
	SCHD1A0101				Header type			537
	SCHD3A0100							
	SCHH1D0100			—		Adapter		

Note

○marks in "Available for automotive use" indicate that some of the series products can work at the operating temperature range from -40°C to +85°C.

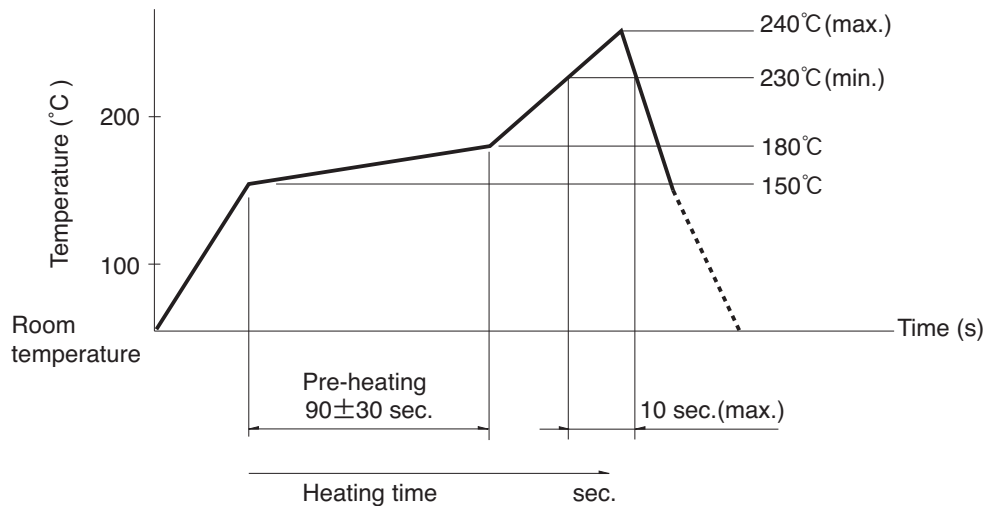
Note

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Soldering Conditions

Example of Reflow Soldering Condition (Reference)

1. Heating method: Double heating method with infrared heater.
2. Temperature measurement: Thermocouple 0.1 to 0.2 ϕ CA (K) or CC (T) at soldering portion.
3. Temperature profile



For SD Memory Card

For microSD™ Card

For SIM Card 8pins

For Memory Stick Micro™

Combine Type

For W-SIM

Please refer to each product's specification sheet to confirm temperature profile.

Cautions for using this product

1.Connector handling precautions

- (1) Safeguard the connector assembly against flux penetration from its top side.
- (2) This product is designed on the assumption that they will not be washed after soldering.

If you wash it, it may cause deterioration of mechanically and electrically.

If washing is necessary, please make contact with us beforehand.

2. When soldering terminals, there is a danger that load placed on the terminals may cause rattle, deformation or electrical degradation to occur depending on the conditions.

Caution is therefore required.

3. When soldering, do not use water soluble flux because this may corrode the product.

4. Regarding the setting of reflow conditions, please confirm them with the actual mass production conditions.

5. As P.W.B. warping may alter characteristics, please take this into consideration when designing pattern and layout.

6. Please do not solder at the ejector pushing position.

7. To prevent contact disturbance by the sulfuration or oxidation of the contact and terminal, and deterioration of solder ability by thin film on the terminal, please note following.

- Storage in the atmosphere of high temperature at 60 degrees or more, high humidity, corrosive gases such as sulfur or chlorine gas, and excessive piling up of the carton boxes shall be avoided.
- Connectors shall be stored as the package not opened and in the normal temperature and normal humidity, and the connectors shall be used preferably within 3 months, at least within 6 months.
- When the connectors are stored after opening the package, the connectors shall be sealed with a polyethylene bag etc. and stored in dark and cool place, avoiding direct sunlight. Bag etc. and stored in dark and cool place, avoiding direct sunlight. The connectors shall be used as soon as possible.

8. Don't push or hold down the metal cover of the connector, otherwise there is a possibility that the card would not be ejected or influences to other function.

9. Please attention following items to prevent connector from miss operation, such as bounding caused by ON/OFF switching and chattering by vibration.

- Repeated reading/writing.
- Establish delay time-recommended 400msec min.
- Establish CR accumulation circuit.

10. This product does not operate normally when the card which does not conform to the specification is used occasionally.