

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
W-SIM

For
Memory
Stick Micro™

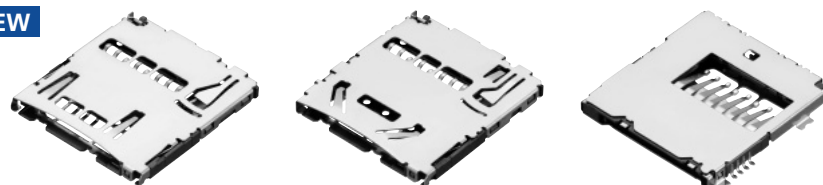
For
Memory
Stick™

Combine Type

For
Compact
Flash™

For CMOS
Camera Module

NEW



Typical Specifications

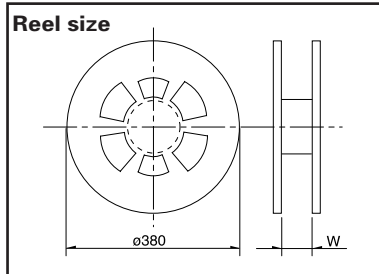
Items		Specifications
Structure	Applicable media	microSD™ Card
	Mounting type	Surface mounting type
	Mounting style	Standard mount/ Reverse mount
	Media ejection structure	Push-push type
Performance	Operating temperature range	−20℃ to +70℃
	Voltage proof	500V AC 1minute
	Insulation resistance (Initial)	1,000MΩ min.
	Contact resistance (Initial)	Connector contacts 100mΩ max.
		Detection switch 500mΩ max.
Insertion and removal cycle		5,000cycles

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			

Dimensions Standard mount

Unit:mm

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

Reverse mount

Unit:mm

No.

Style

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

Slim type with switch

3

Connector center
microSD
Card center

(0.875)

(3.9) Elect stroke

Circuit Diagram for Detect Switch

Detect Switch Inserting Card=ON
Common → Normal=OFF

Pin assignments

PIN	SD Mode	PIN	SD Mode
#1	DAT2	#5	CLK
#2	DAT3/CD	#6	V _{SS}
#3	CMD	#7	DAT0
#4	V _{DD}	#8	DAT1

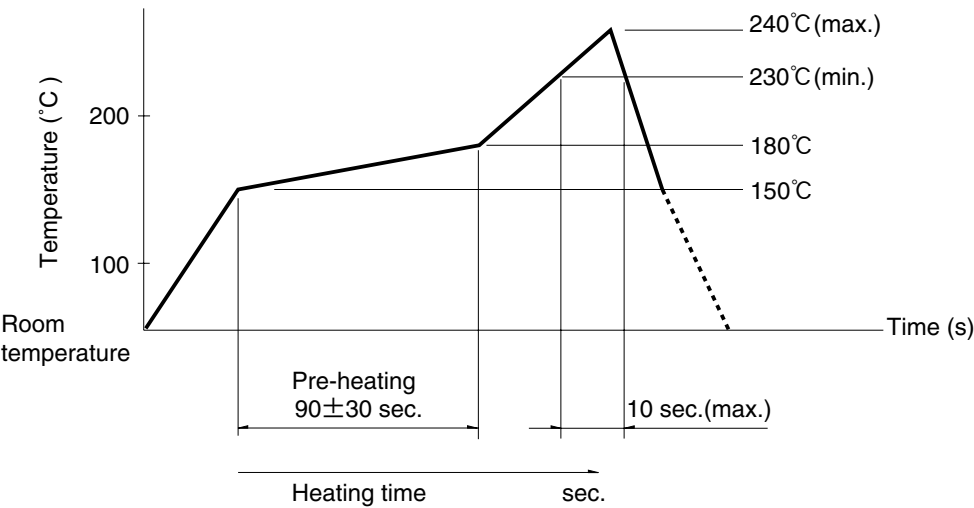
Externals

NO Pattern Area
Land Area
P.C.B cut on the point of CARD interference.

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) .
- 3. Temperature profile (Surface of products) .



Cautions for using this product

- 1. 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.
- 2. Avoid use of water-soluble soldering flux, since it may corrode the product.
- 3. Check and conform to reflow soldering requirements under actual mass production conditions.
- 4. PC board warping may alter the characteristics. Please take this into consideration when designing patterns and layout.
- 5. The card specifications are provided by the above manufactures. Products by other manufactures may not be compliant with these specifications and are subject to change without prior notice.

Mouser Electronics

Authorized Distributor

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ALPS:

[SCHA4B0400](#) [SCHA5B0200](#) [SCHA1B0100](#) [SCHA4B0100](#) [SCHA1A0101](#) [SCHA2B0300](#)