



**Wide range of profile heights of block-style SIM card connectors and high contact normal force offer superb mobile device interconnect usability and reliability**

## Features and Benefits

High contact normal Force	Maintains reliable electrical contact
Gold-plated contacts and soldertails	Ensure connector reliability by a stable and low contact-resistance over the operating life of applications
Wide spectrum of connector height choices	To suit a variety of profile-height requirements and applications
Rounded geometry of contact terminals	Ensures smooth gliding action of the SIM card on the connector during mating
3-axis placement of SIM cards (Series 47019 only)	Offers high degree of freedom and flexibility in mobile device design
Halogen-free, lead-free	Promotes environmental sustainability

## SIM Card Connectors, Block-style, Halogen-free

### Nominal Height\*

78545 0.30mm

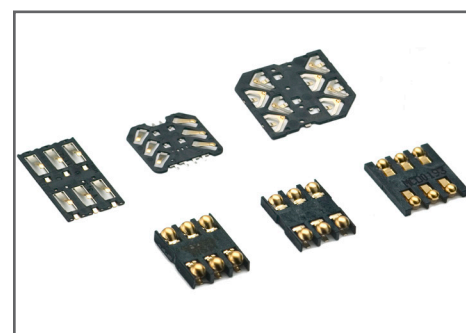
151059 0.34mm

151032 0.38mm

47535 0.95mm

47550 1.30mm

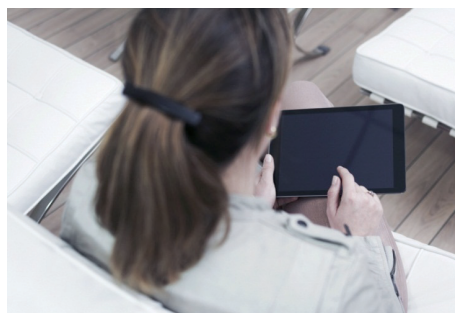
47019 1.50, 2.00 and 2.40mm



Block-style SIM Card Connectors

## Applications

- Smartphones and mobile devices
- Tablet PCs
  - Phablets (a larger category of smart phones that combines the functionality of smart phones with those of tablets)
  - Any mobile device that uses SIM cards



Phablets



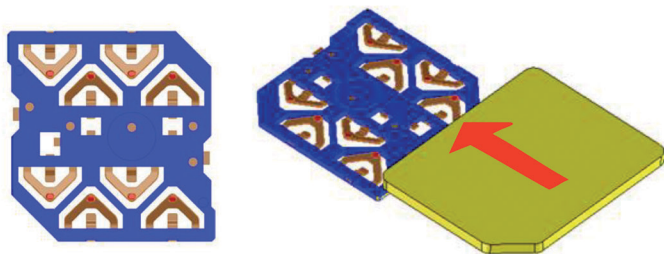
Mobile devices

\*Nominal heights are product identifier dimensions taken to mean the sum of soldertail and housing heights. Refer to Additional Product Features section and Order Information Table for details of soldertail, housing and contact heights.

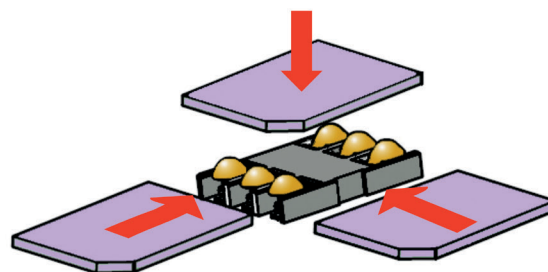


## Product Features

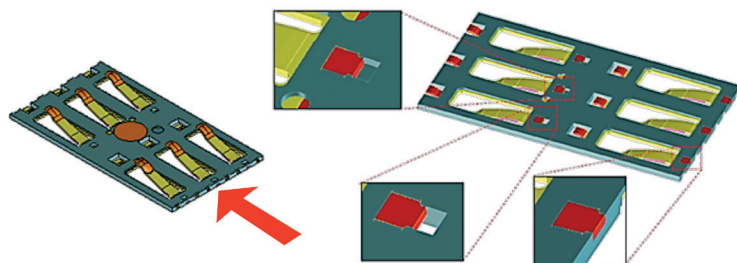
**SIM Card Connectors,  
Block-style,  
Halogen-free**



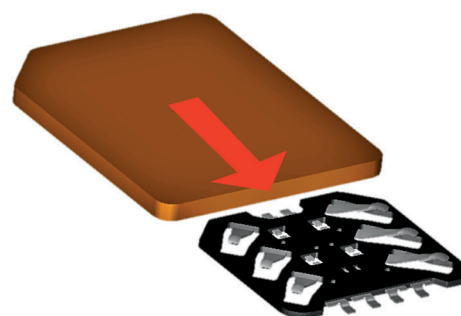
**8-circuit, Series 151032 Block-style SIM Card Connector with anti-crush contacts**



**6-circuit, Series 47019 Block-style SIM Card Connector with 3 card placement directions**

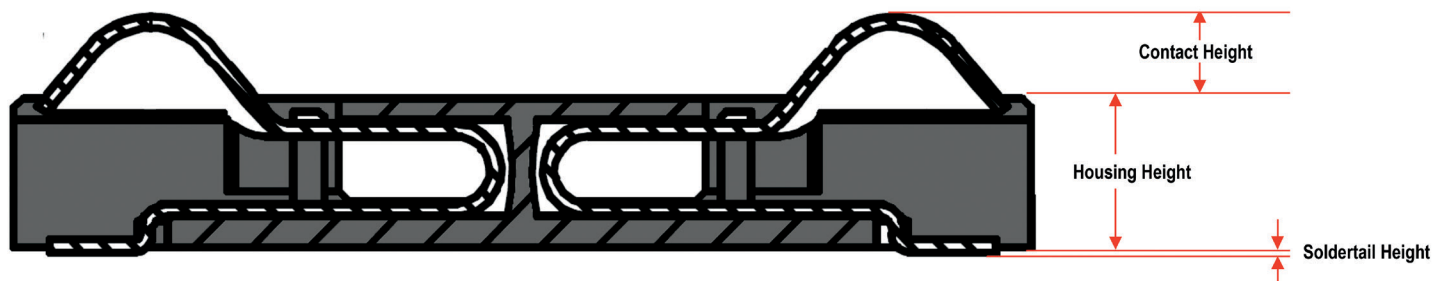


**6-circuit, Series 78545 Block-style SIM Card Connector with 12 soldering pads  
(Remark: Red arrow shows card insertion direction)**



**6-circuit, Series 151059 Block-style SIM Card Connector**

## Additional Product Features – Soldertail, Contact and Housing Heights



**Cross-section of the Series 47019 Connector showing Soldertail, Contact and Housing Height Measurements**

**(Remark 1: The same definitions apply to all other connectors in this release)**

**Remark 2: For connectors with soldertail included within the housing  
(example: 78545) the soldertail height will be assigned zero value)**

### Reference Information

Packaging: Tape and Reel

Mates With: SIM Cards

Terminal Used:

Phosphor bronze (47019);

Beryllium Copper (47535);

Copper Alloy (47535, 47550, 78545,  
151032, 151059)

Designed In: Millimeters

RoHS: Yes

Halogen Free: Yes

Glow Wire Compliant: No

### Electrical

Voltage (max.): 10 (151032, 151059);  
15V DC (47019, 47535, 47550, 78545)

Current (max.): 0.5A per contact

Low Level Contact Resistance (max.):  
50 (47019, 47535, 151032);  
100 milliohms initial (78545, 151059)

Dielectric Withstanding

Voltage (1 minute): 500V AC

Insulation Resistance (min.):

500 (47535);

1000 (47019, 47550, 78545,  
151032, 151059) Megohms

### Mechanical

Contact Normal Force (per contact):

0.2N min. and 0.6N max.

(47019, 47550);

0.3N min.

(78545, 151032 and 151059);

0.6 to 0.8N at 0.40mm deflection  
(47535);

Terminal Retention Force (per contact):

1N (47535); 3N (47019, 47550);

Durability:

3000 (x- and y-axis directions)  
and 10,000 (z-axis or vertically)  
(47019, 47550);

3000 (1 horizontal direction) (151032);

750 (1 horizontal direction) (151059);

500 (x- and y-axis directions) (47535)  
and (1 horizontal direction) (78545)

### Physical

Housing:

LCP, Glass-filled, UL94 V-0, Black

Contact: Copper Alloy

Plating:

Contact Area — 0.80 (47019,  
47550); 0.75 to 1.25 (47535); 0.38  
(78545); 0.127 (151032) and  
0.50µm (151059) Gold (Au)

Solder Tail Area — 0.05 (47019,  
47550, 47535); 0.05 to 0.125  
(47535); 0.025 (151032) Gold (Au)  
and 2.00µm Matt Tin (Sn) (151059)

Underplating — 2µm (80µ") Nickel  
overall (47019, 78545, 151032)  
— 1.25 to 3.75µm Nickel overall (47535)  
— 1.27µm Nickel (151059)

Operating Temperature:

-20 to +70°C (47535)

-30 to +85°C (47019, 47550,  
78545, 151032);

-40 to +85°C (151059)

## Ordering Information

Order No.	Circuits	Soldertail Height* (mm)	Housing Height* (mm)	Contact Height* (mm)	Soldering points
<a href="#">47019-1501</a>	6	0.05	1.50	0.75	6
<a href="#">47019-2001</a>			2.00		
<a href="#">47019-2401</a>			2.40		
<a href="#">47535-0001</a>			0.95	0.60	
<a href="#">47550-0001</a>			1.30	0.70	
<a href="#">78545-0010</a>		Nil	0.30	0.85	12
<a href="#">151032-0001</a>	8	0.03	0.35	0.40	8
<a href="#">151059-0001</a>	6	0.04	0.30	0.58	6

\*Refer to Additional Product Features section for Soldertail, Housing and Contact Height measurements