

Configurable from 6- to 8-circuits, Molex's ultra-compact 1.50mm-height push-push style SIM Card sockets support high-durability and environmental requirements of ultra-slim mobile phone makers

As mobile communication devices become increasing smaller, mobile phones, portable GSM modems and access-control terminals such as EPOS (Electronic Point-of-Sale) and Satellite Receiver terminals require more compact and durable Subscriber Identity Module (SIM) Card sockets to enable reliable connection for user identification, data gathering and transmission services. The push towards a 'greener' environment has led electronic device manufacturers to develop products that are more environmentally safe and friendly.

Molex has developed a 1.27mm (.050") pitch, 8-circuit, ultra-slim push-push style SIM Card Socket that is both durable and compact, and is environmentally friendly. Featuring a low profile height of 1.50mm (.059") and a high durability rating of 10,000 mating cycles, the series 78526 SIM Card socket is configurable to 6 circuits and comes complete with card- detection capability and full shielding against EMI interference. It uses a high-temperature housing material and is both lead-free and halogen-free.

Other 1.27mm (.050") pitch, push-push style SIM Card products include: a lead-free, 8-circuit socket with 1.90mm (.075") mounting height (series 47603) and a selection of three 6-circuit sockets with 1.80mm (.071") profile height (series 47553). Also available is a 2.54mm (.100") pitch, 6-circuit socket with 2.60mm (.102") height (105034 series) for non-ultra-slim applications.

Molex's range of SIM Card sockets allows for easy card insertion and extraction and can be customized to satisfy design and performance features required by the customer.

For more product information, visit our website at: www.molex.com/product/memory/simcard.html

**SIM Card Sockets,
Push-Push Style,
6- and 8-Circuit,
1.27mm (.050") and
2.54mm (.100") Pitch,
Lead-free**

- 1.27mm (.050") Pitch**
- 78526** 1.50mm (.059") Height, 8 Circuits, Low Profile, Halogen-free
- 47603** 1.90mm (.075") Height, 8 Circuits
- 47553** 1.80mm (.071") Height, 6 Circuits
- 2.54mm (.100") Pitch**
- 105034** 2.60mm (.102") Height, 6 Circuits

FEATURES AND BENEFITS

- A variety of profile heights of 1.50mm (.059"), 1.80mm (.071"), 1.90mm (.075") and 2.60mm (.102") available to suit customer applications
- High-temperature thermoplastic housing allows lead-free processing
- All parts have full shielding to protect from electromagnetic interference
- All parts are ELV- and RoHS-compliant to meet environmental standards
- Standard socket form factor allows all industry-standard SIM Cards to be used
- Molex can design products using a combination of detect pins, locating pegs, plating, pick-and-place, packaging and many more features to meet customer requirements



Molex's range of environmentally friendly 6- and 8-circuit push-push style SIM Card sockets

Reference Information

Pitch:
1.27mm (.050")
(series 78526, 47603, 47553)
2.54mm (.100") (series 105034)

Packaging: Embossed Tape on Reel

UL File No.: To be advised

CSA File No.: To be advised

Use With: Standard SIM Card

Designed In: millimeters

RoHS: Yes

Halogen Free: Yes (series 78526 only)

Glow Wire Compliant: No

Electrical

Voltage (max.): 50V DC

Current (max.): 0.5A DC

Contact Resistance (initial)
: 50 milliohms (series 105034)
: 100 milliohms (others)

Dielectric Withstanding Voltage:
500V AC

Insulation Resistance (min.)
: 100 Megaohms (others)
: 1,000 Megaohms (series 105034)

Mechanical

Card Insertion Force (max.)
: 10N (series 105034)
: 15N (others)

Durability (min.):
Refer Ordering Information Table below

Physical

Housing: High temperature thermoplastic

Contact:
Phosphor Bronze (series 105034)
Copper Alloy (others)

Plating:
Contact Area
— 0.76 μ m (30 μ "") Gold (Au)
(series 78526, 47603, 105034
and 47553-1001)
— 0.38 μ m (15 μ "") Gold (Au)
(47553-0001 and 47553-2001)

Solder Tail Area
— 0.08 μ m (3 μ "") Tin (Sn)
(47553 and 47603)
— 1.27 μ m (50 μ "") Tin (Sn)
(105034)
— 2.54 μ m (100 μ "") Matt Tin (Sn)
(78526)

Underplating
— 1.27 μ m (50 μ "") Nickel (Ni)

Operating Temperature
: -40 to +85°C (series 105034)
: -20 to +70°C (series 47603)
: -20 to +85°C (others)

SIM Card Sockets, Push-Push Style, 6- and 8-Circuit, 1.27mm (.050") and 2.54mm (.100") Pitch, Lead-free

MARKETS AND APPLICATIONS

- Data Computing Devices
 - Notebook PCs, laptops, mini-notebooks
 - Netbook PCs
 - Tablet PCs
- Mobile Communication Devices
 - Cellular phones
 - Smart phones
 - PDAs (Personal Digital Assistants)
- Navigation Tracking Devices
 - Global Positioning System (GPS) Trackers



Tablet PC



PDA and Cell phone



GPS Tracker



Notebook PC

PRODUCT RANGE



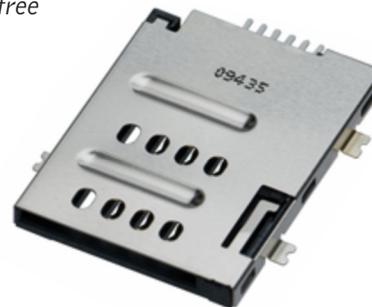
1.27mm (.050") Pitch, 1.50mm (.059") Height SIM Card Socket
 Low Profile, 8 Circuit, 1 Card Detect Pin, with Pegs,
 Lead-free, Halogen-free
 (78526-0001)



1.27mm (.050") Pitch, 1.90mm (.075") Height
 SIM Card Socket
 8 Circuit, 2 Card Detect Pins, Lead-free
 (47603-0001)



1.27mm (.050") Pitch, 1.80mm (.071") Height SIM Card Socket
 6 Circuit, 2 Card Detect Pins and Pegs, Lead-free
 (47553-1001 and 47553-2001)
 (Remark: 47553-0001 is a peg-less version)



2.54mm (.100") Pitch, 2.60mm (.102") Height
 SIM Card Socket
 6 Circuit, with Pegs and 3 Solder Tabs, Lead-free
 (105034-1001)

**SIM Card Sockets,
 Push-Push Style,
 6- and 8-Circuit,
 1.27mm (.050") and
 2.54mm (.100") Pitch,
 Lead-free**

ORDERING INFORMATION

Order No.	Profile Height	Circuit Size	Number of Detect Pins	Pegs	Durability (Mating Cycles)
78526-0001	1.50mm (.059")	8	1	Yes	10,000
47603-0001	1.90mm (.075")			No	5,000
47553-0001	1.80mm (.071")	6	2	No	2,500
47553-2001					Yes
47553-1001					
105034-0001	2.60mm (.102")		None	No	5,000