

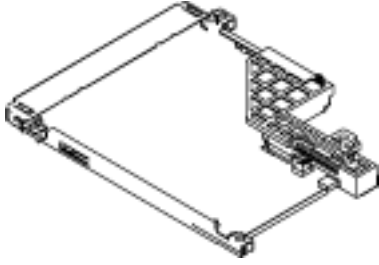
ExpressCard*	M-2
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*ExpressCard is a trademark of PCMCIA

[†]TransFlash is a trademark of SanDisk Corporation

1.00mm (.039") Pitch ExpressCard* Ejector Assembly

47150
Push-Push Type
Screw Mount



Order No.	Description	Lead-free
47150-0003	Without Bottom Shell	Yes
47150-0004	With Bottom Shell	

*ExpressCard is a trademark of PCMCIA

Features and Benefits

- Smooth guide rail design enables modules to be easily inserted and ejected
- Clip grounding design provides lower contact resistance
- Plastic heart cam slider with push-out function prevents scratches from modules
- The use of plastic material on universal guidance feature enhanced lead-in of modules
- Nut plate design in metal shell provides space saving on PCB

Reference Information

Product Specification: PS-47202-001
Packaging: Tray
Use With: 47150-0002 header
Designed In: Millimeters

Mechanical

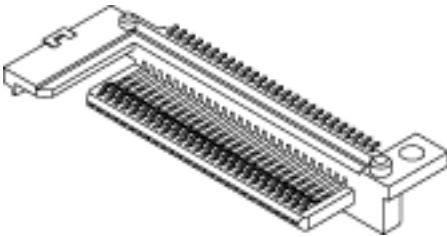
Durability: 10,000 cycles

Physical

Housing: High-temperature thermoplastic, UL 94V-0
Operating Temperature: 0 to +55°C

1.00mm (.039") Pitch ExpressCard* Header

47150
Top Mount, SMT



Order No.	Lead-free
47150-0002	Yes

*ExpressCard is a trademark of PCMCIA

Features and Benefits

- Compatible with ExpressCard™ standard
- Low profile of mounted height: 5.40mm (.213")
- Beveled spring contact design provides secure contact force and mating retention
- Polarization shape prevents from mismatching of PCB
- Fitting nail design reinforce hold-on to PCB

Reference Information

Product Specification: PS-47202-001
Packaging: Tray
Use With: 47150-0003 or 47150-0004 ejector assembly
Designed In: Millimeters

Electrical

Voltage: 3.3V DC
Current: 0.75A
Contact Resistance: 40 milliohms max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 100 Megohms min.

Mechanical

Mating Force: 39.00N
Unmating Force: 3.70N
Durability: 10,000 cycles

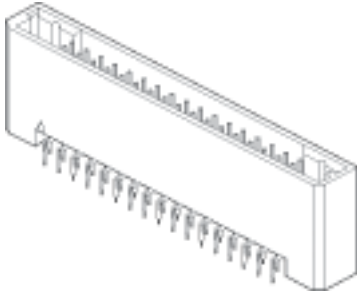
Physical

Housing: High-temperature thermoplastic, UL 94V-0
Contact: Copper Alloy
Plating: Contact Area—Gold
Solder Tail Area—Tin
Underplating: Nickel
Operating Temperature: 0 to +55°C

1.27mm (.050") Pitch PC Card Header

94208

**Single Port, Flush Profile
Vertical, Top Mount
Through Hole**



Features and Benefits

- Compatible with PCMCIA and JEIDA standards
- Screw holes inside the shrouded housing (no mounting ears)
- Accepts any PCMCIA Type I, II or III cards

Reference Information

Product Specification: PS-94208
Packaging: Tube
Designed In: Millimeters

Electrical

Voltage: 100V
Current: 0.5A
Contact Resistance: 40 milliohms max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 Megohms min.

Mechanical

Contact Retention to Housing: 9.8N min.
Mating Force: 39.2N max.
Unmating Force: 6.67N min.
Durability: 10,000 cycles

Physical

Housing: Black nylon 6/6, UL 94V-0
Contact: Phosphor Bronze
Plating: Gold over Palladium Nickel on contact area, 150µ" min. Tin on solder tails, 20µ" min. Nickel underplate overall
Operating Temperature: -25 to +80°C

Circuits	Order No.	Board Mount	Lead-free
68	94208-0011	Vertical	Yes

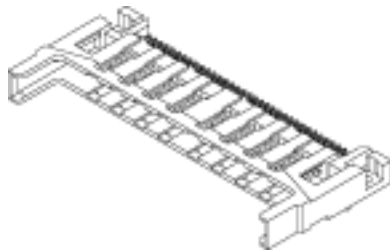
Pin No.	Dimension L
36 and 67	3.50 (.138)
All other pins	4.25 (.167)
1, 17, 34, 35, 51 and 68	5.00 (.197)

www.molex.com/product/memory

1.27mm (.050") Pitch PC Card Header

67130

**Single Slot, Flush Profile
Top Mount, Right Angle, SMT**



Features and Benefits

- Low voltage: 3.3V key
- Low Profile: 5.45mm (.215") height
- Single inline surface mount tails: 0.635mm (.025") pitch
- High temperature housing for IR process
- Top mounting version
- Accepts any PCMCIA Type I, II and III cards and any Type I or II cards with ejector mechanism

Reference Information

Product Specification: PS-67160-011
Packaging: Tray
Use With: 67121-0001 Ejector
Designed In: Millimeters

Electrical

Voltage: 100V
Current: 0.5A
Contact Resistance: 40 milliohms max.
Insulation Resistance: 1000 Megohms min.

Mechanical

Contact Retention to Housing: 9.8N (2.205 lb) min.
Mating Force: 39.2N (8.82 lb) max.
Unmating Force: 6.67N (1.50 lb) min.
Durability: 10,000 cycles

Physical

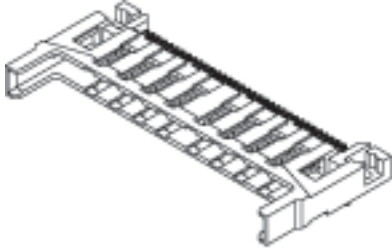
Housing: White Glass-filled LCP, UL 94V-0
Contact: Phosphor Bronze
Plating: Contact Area—Gold over Palladium Nickel
Solder Tail Area—Tin
Underplating—Nickel
Operating Temperature: -20 to +85°C

Circuits	Order No.	Voltage Key	Lead-free
68	67130-0802	3.3V Key	Yes

1.27mm (.050") Pitch One Slot Cardbus Header

67130

Flush Profile, Top Mount Right Angle, SMT



Features and Benefits

- Low voltage: 3.3V key
- Low Profile: 5.45mm (.215") height
- Compatible with PCMCIA standard
- Single inline surface mount tails: 0.635mm (.025") pitch
- High temperature housing for IR process
- 8 grounding plates reinforce the ground bounce performance
- Top mounting version
- Accepts any PCMCIA Type I, II and III cards and Cardbus cards and any Type I or II cards with ejector mechanism

Reference Information

Product Specification: PS-67160-011
 Packaging: Tray
 Use With: 67121-0001, 67121-0003 or
 67121-005 Ejector
 Designed In: Millimeters

Electrical

Voltage: 100V
 Current: 0.5A
 Contact Resistance: 40 milliohms max.
 Insulation Resistance: 1000 Megohms min.

Mechanical

Contact Retention to Housing: 9.8N min.
 Mating Force: 39.2N max.
 Unmating Force: 6.67N min.
 Durability: 10,000 cycles

Physical

Housing: White glass-filled LCP, UL 94V-0
 Contact: Phosphor Bronze
 Plating: Palladium Nickel with Gold Flash
 Operating Temperature: -20 to +60°C

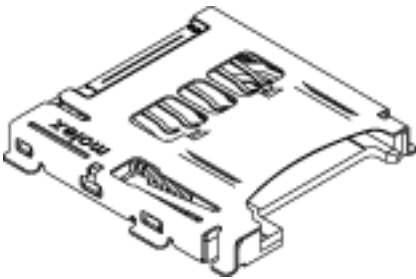
Circuits	Order No.	Voltage Key	Lead-free
68	67130-0801	3.3V Key	Yes

www.molex.com/product/pccard/

1.10mm (.043") Pitch microSD Memory Card

49225

Reverse With Detect Switch



Features and Benefits

- Ultra-small size for space savings
- Push-pull card eject enables easy extraction
- Metal shielding with shell tabs provides ESD protection and grounding support
- Gold-plated beveled spring contacts provide secure contact force and mating retention
- Wide open area on shells accommodates pick-and-place

Reference Information

Product Specification: PS-49225-001
 Packaging: Embossed tape on reel
 Use With: microSD card and T-Flash card
 Designed In: Millimeters

Electrical

Voltage: 100V
 Current: 0.5A
 Contact Resistance: 100 milliohms max.
 Dielectric Withstanding Voltage: 500V AC
 Insulation Resistance: 1000 Megohms min.

Physical

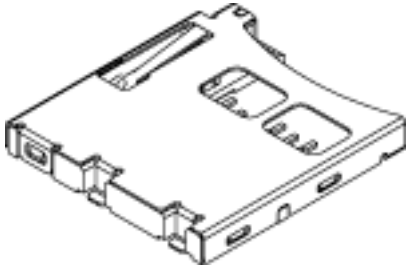
Housing: LCP (Liquid Crystal Polymer)
 Contact: Copper Alloy
 Plating: Contact Area—Gold
 Solder Tail Area—Gold Flash
 Underplating: Nickel
 Operating Temperature: -25 to +85°C

Circuits	Order No.	Description	Lead-free
8	49225-0811	Normal Retention Force Version	Yes
	49225-0821	Low Retention Force Version	

1.10mm (.043") Pitch TransFlash* (microSD) Memory Card Connector

500873

**Normal-Mount, SMT, Shielded
1.88mm (.074") Mounted Height**



Circuits	Order No.	Lead-free
8	500873-0801	Yes

*Note: TransFlash is a trademark of SanDisk Corporation

Features and Benefits

- Ultra small size for space savings
- Push-push ejector offers easy card extraction and tactile feel
- Metal shielding and integral solder tabs provide ESD protection
- Gold-plated beveled spring contacts provide secure contact force and mating retention
- Solder tails on inside of design provide space savings

Reference Information

Product Specification: PS-500873-001
Use With: microSD and TransFlash memory cards
Packaging: Embossed tape
Designed In: Millimeters

Electrical

Voltage: 100V
Current: 0.5A max.
Contact Resistance: 100 milliohms max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 Megohms min.

Mechanical

Mating Force: 13.8N (3.10 lb)
Unmating Force: 13.8N (3.10 lb)
Durability: 5,000 cycles

Physical

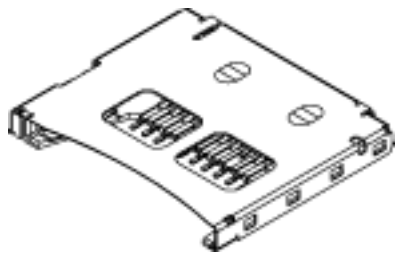
Housing: Black LCP, UL 94V-0
Contact: Copper Alloy
Plating: Contact Area—Gold
Solder Tails—Tin
Underplating: Nickel
Operating Temperature: -25 to +85°C

www.molex.com/product/memory/transflash.html

1.30mm (.051") Pitch miniSD Memory Card Connector

500525

**Normal-Mount SMT, Shielded
2.45mm (.096") Mounted Height
With Detect Switch and Pegs**



Circuits	Order No.	Pegs	Lead-free
11	500525-1100	Yes	Yes
	500525-1120		

Features and Benefits

- Compact size provides space savings
- Spring lock provides secure card retention
- Push-push ejector offers easy card extraction and tactile feel
- Metal shielding and integral solder tabs provide ESD protection
- Detect switch for card recognition
- Robust shell provides card protection

Reference Information

Product Specification: PS-500525-001
Packaging: Embossed tape
Designed In: Millimeters

Electrical

Voltage: 10V
Current: 0.5A max.
Contact Resistance: 100 milliohms max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 Megohms min.

Mechanical

Durability: 10,000 cycles

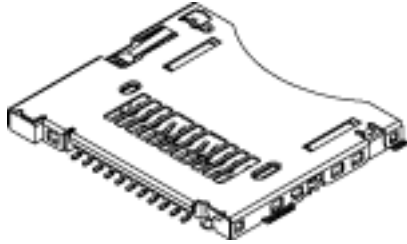
Physical

Housing: Black LCP, UL 94V-0
Contact: Copper Alloy
Plating: Contact—Gold; Tail—Tin
Underplating: Nickel
Operating Temperature: -25 to +90°C

1.30mm (.051") Pitch miniSD Memory Card Connector

500652

**Reverse-Mount SMT, Shielded
2.15mm (.085") Mounted Height
With Detect Switch and Pegs**



Circuits	Order No.	Lead-free
11	500652-1107	Yes

Features and Benefits

- Compact size provides space savings
- Spring lock provides secure card retention
- Push-push ejector offers easy card extraction and tactile feel
- Metal shielding and integral solder tabs provide ESD protection
- Detect switch for card recognition
- Robust shell provides card protection

Reference Information

Product Specification: PS-500652-001
Packaging: Embossed tape
Designed In: Millimeters

Electrical

Voltage: 10V
Current: 0.5A max.
Contact Resistance: 100 milliohms max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 Megohms min.

Mechanical

Contact Retention Force: 0.98N (0.22 lb)
Durability: 10,000 cycles

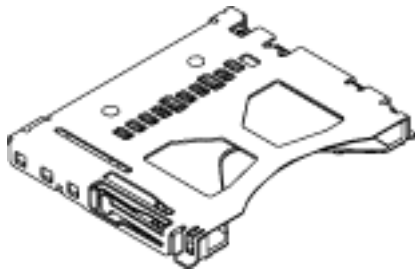
Physical

Housing: Black high-temperature polymer, UL 94V-0
Contact: Copper Alloy
Plating: Contact—Gold; Tail—Tin/Copper
Underplating: Nickel
Operating Temperature: -25 to +85°C

1.30mm (.051") Pitch miniSD Memory Card Connector

500972

**Reverse-Mount, SMT, Shielded
2.20mm (.087") Mounted Height
With Detect Switch and Pegs**



Circuits	Order No.	Lead-free
11	500972-1107	Yes

Features and Benefits

- Compact size provides space savings
- Spring lock provides secure card retention
- Push-push ejector offers easy card extraction and tactile feel
- Metal shielding and integral solder tabs provide ESD protection
- Detect switch for card recognition
- Robust shell provides card protection

Reference Information

Product Specification: PS-500972-001
Packaging: Embossed tape
Designed In: Millimeters

Electrical

Voltage: 10V
Current: 0.5A max.
Contact Resistance: 100 milliohms max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 Megohms min.

Mechanical

Contact Retention Force: 0.98N (0.22 lb)
Durability: 10,000 cycles

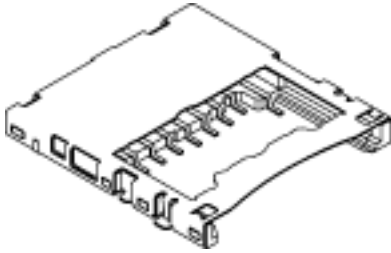
Physical

Housing: Black LCP, UL 94V-0
Contact: Copper Alloy
Plating: Contact—Gold; Tail—Tin
Underplating: Nickel
Operating Temperature: -25 to +85°C

2.50mm (.098") Pitch SD Memory Card Connector

500998

**Normal-Mount, SMT, Shielded
3.10mm (.122") Mounted Height**



Circuits	Order No.	Lead-free
9	500998-0900	Yes

Features and Benefits

- Beveled spring contacts provide secure contact force and mating retention
- Low-profile design provides space savings
- Push-push ejector offers easy card extraction and tactile feel
- Metal shielding and integral solder tabs provide ESD protection
- Top window provides card visibility
- Robust shell provides card protection

Reference Information

Product Specification: PS-500998-003
Packaging: Embossed tape
Designed In: Millimeters

Electrical

Voltage: 100V
Current: 0.5A max.
Contact Resistance: 80 milliohms max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 Megohms min.

Mechanical

Mating Force: 13.8N (3.10 lb)
Unmating Force: 13.8N (3.10 lb)
Contact Retention Force: 0.98N (0.22 lb)
Durability: 10,000 cycles

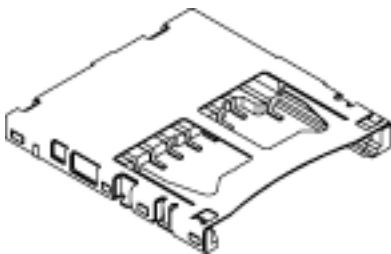
Physical

Housing: Black LCP, UL 94V-0
Contact: Copper Alloy
Plating: Gold
Underplating: Nickel
Operating Temperature: -25 to +85°C

2.50mm (.098") Pitch SD Memory Card Connector

500999

**Normal-Mount, SMT, Shielded
3.10mm (.122") Mounted Height
Ultra-Short Solder Tabs**



Circuits	Order No.	Lead-free
9	500999-0900	Yes

Features and Benefits

- Beveled spring contacts provide secure contact force and mating retention
- Low profile design provides space savings
- Push-push ejector offers easy card extraction and tactile feel
- Metal shielding and integral solder tabs provide ESD protection
- Top window provides card visibility
- Robust shell provides card protection

Reference Information

Product Specification: PS-500999-001
Packaging: Embossed tape
Designed In: Millimeters

Electrical

Voltage: 100V
Current: 0.5A max.
Contact Resistance: 80 milliohms max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 Megohms min.

Mechanical

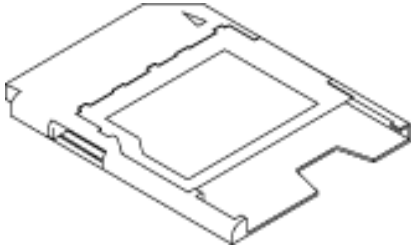
Mating Force: 13.8N (3.10 lb)
Unmating Force: 13.8N (3.10 lb)
Contact Retention Force: 0.98N (0.22 lb)
Durability: 10,000 cycles

Physical

Housing: Black LCP, UL 94V-0
Contact: Copper Alloy
Plating: Gold
Underplating: Nickel
Operating Temperature: -25 to +85°C

2.50mm (.098") Pitch miniSD-to-SD Card Adapter

501471
With Write-Protect Switch



Circuits	Order No.	Lead-free
9	501471-0900	Yes

Features and Benefits

- Accepts miniSD cards and can be used in SD card ports
- Write-protect switch provides data protection
- Card lock provides secure card retention
- Custom logos available

Reference Information

Product Specification: PS-501471-001
Packaging: Tray
Mates With: miniSD cards and standard SD ports
Designed In: Millimeters

Electrical

Voltage: 100V
Current: 0.5A max.
Contact Resistance: 200 milliohms/2 contact max.
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 Megohms min.

Mechanical

Contact Retention Force to Housing: 0.98N (0.1kgf)
Durability: 10,000 cycles

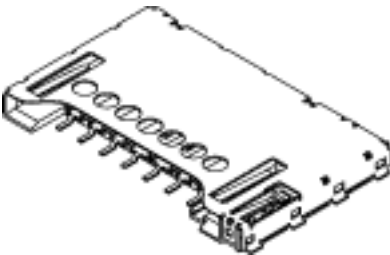
Physical

Housing: Black PC, ABS
Contact: Copper Alloy
Plating: Contact Area—Gold
Operating Temperature: -25 to +60°C

www.molex.com/product/minisd.html

2.50mm (.098") Pitch Reduced-Size MultimediaCard (RS-MMC) Connector

500990
Normal-Mount SMT, Shielded
Push-Push



Circuits	Order No.	Lead-free
7	500990-0700	Yes

Features and Benefits

- Compact size provides space savings
- Beveled spring contact design provides secure contact force and mating retention
- Push-push ejector offers easy card extraction and tactile feel
- Metal shielding provides ESD protection
- Twelve shell tabs provide additional grounding and PCB retention

Reference Information

Product Specification: PS-500990-001
Packaging: Embossed tape
Designed In: Millimeters

Electrical

Voltage: 125V
Current: 0.5A max.
Contact Resistance: 60 milliohms max.
Dielectric Withstanding Voltage: 1000V AC
Insulation Resistance: 1000 Megohms min.

Mechanical

Mating Force: 14.70N (3.30 lb) max.
Unmating Force: 14.70N (3.30 lb)
Contact Retention Force: 0.50N (0.1 lb) min.
Durability: 10,000 cycles

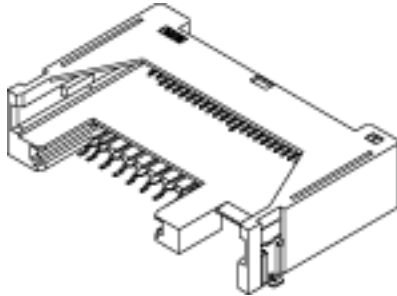
Physical

Housing: Black LCP, UL 94V-0
Contact: Copper Alloy
Plating: Contact—Gold; Tail—Tin
Underplating: Nickel
Operating Temperature: -30 to +85°C

3-in-1 Memory Combo Connector SD/MMC/CF

87723

Top Mount, SMT
Non-Push Type



Order No.	Tail Plating	Lead-free
87723-0010	Full Tin over Nickel	Yes
87723-0020	Gold Flash over Nickel	

Features and Benefits

- RoHS Compliant
- Polarizing and locating pegs ensure correct placement to PCB
- Single row of solder tails eases assembly and rework
- Card detect and protect switches ensure data protection and card mismatch
- Flat surface at connector CG allows automated assembly
- SD pin protect allows internal rig with robust support to pin 9

Reference Information

Product Specification: PS-87723-008
Packaging: Tray
Designed In: Millimeters

Electrical

Voltage: 24V
Current: 0.5A
Contact Resistance: SD/MMC—40 milliohms max.
CF—60 milliohms max.
Dielectric Withstanding Voltage: 500V AC/1 minute
Insulation Resistance: 1000 Megohms min.

Mechanical

Contact Retention to Housing: 1.5 N (0.15kgf) min.
Mating Force: SD/MMC—40N (4.08kgf) max.
CF—28.8N (2.93kgf) max.
Unmating Force: SD/MMC—0.20N (0.02kgf) min.
CF—4.9N (0.5kgf) min.

Physical

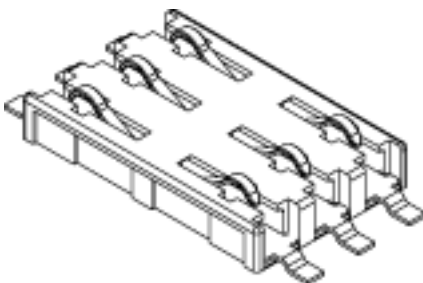
Housing: Black nylon, UL 94V-0
Contact: Phosphor Bronze
Plating: Contact area—0.2 μ m (8 μ in) Gold over Nickel
Plating Tail—See table
Operating Temperature: -55 to +85°C

www.molex.com/customer.html?seriesNumber=87723

2.54mm (.100") Pitch Compact SIM Card Reader Connector

94314

6 Circuit
Low Profile, SMT



Features and Benefits

- Electrical connection between SIM card and mobile phone
- No PCB slot needed
- SMT lead configuration
- PCB top mounting
- Low cycle version available

Reference Information

Product Specification: PS-94314-009
Packaging: Tape and reel
Mates With: SIM card ISO 7816-2 or GSM card 11.11
Designed In: Millimeters

Electrical

Voltage: 5V
Current: 10.0mA
Contact Resistance: 30 milliohms max.
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 5000 Megohms min.

Mechanical

Contact Retention Force: 1N (0.22 lb) min.
Solder Force to PCB: 9.8N (2.20 lb) min.
Normal Force: 0.5N (0.11 lb) max.
Durability: See Table

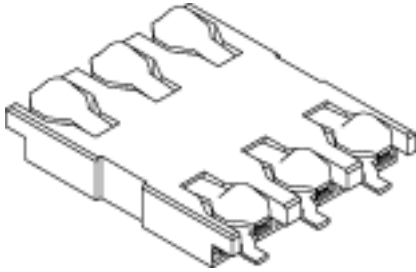
Physical

Housing: Black LCP, UL 94V-0
Contact: Phosphor Bronze Copper Tin
Plating: Contact Area—See Table
Solder Tail Area—Tin
Underplating—Nickel
Coplanarity: 0.10mm (.004")
Operating Temperature: -40 to +85°C

Order No.	Housing Height	Durability	Contact Area Plating	Lead-free
94314-5006	1.20 (.047)	10,000 cycles max.	Gold over Palladium Nickel	Yes
94314-5026		3,000 cycles max.	Gold	
94314-5906	1.90 (.075)	10,000 cycles max.	Gold over Palladium Nickel	
94314-5926		3,000 cycles max.	Gold	

2.54mm (.100") Pitch SIM Card Connector Dome

49021
SMT



Features and Benefits

- GSM SIM card compatible
- Dome type contact provides SIM card insertion from x, y and z axis
- Pick-and-place packaging allows for automatic placement on PCB
- 0.10mm (.004") coplanarity of solder tails
- Surface-mount lead-free PC tails

Reference Information

Product Specification: PS-49021-001
 Packaging: Embossed tape on reel
 Mates With: Industry Standard SIM Card
 Use With: SIM Card
 Designed In: Millimeters

Electrical

Voltage: 5V
 Current: 0.5A
 Contact Resistance: 50 milliohms max.
 Dielectric Withstanding Voltage: 1000V AC
 Insulation Resistance: 1000 Megohms min.

Mechanical

Normal Force: 0.50N (.112 lb)
 Durability: 10,000 cycles

Physical

Housing: Polyamide, UL 94V-0
 Contact: Copper Alloy
 Plating: Contact Area—Gold
 Solder Tail Area—Gold Flash
 Underplating: Nickel
 Operating Temperature: -40 to +85°C

Circuits	Order No.	Description	Lead-free
6	49021-0617	Bright	Yes
	49021-0618	Semi-Bright	