



Qikmate panel and cable connectors

Description

The versatile “SMS” Qikmate panel and cable connectors are a highly cost-effective system approach to solving the constant demand for more cost effective interconnection techniques.

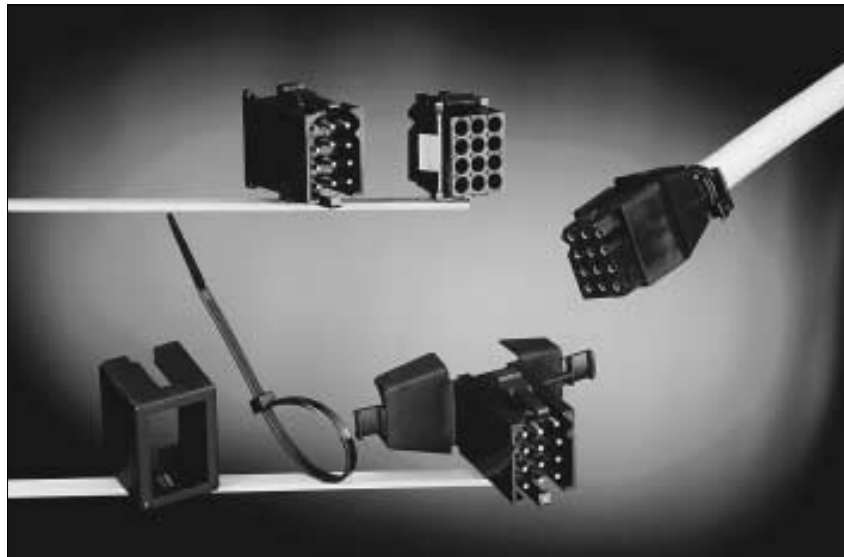
It is a range of multiway connectors using N° 16 TRIM TRIO .0625” (1.6mm) diameter contacts and available in 10 contact arrangements from 2 to 36 positions. Having no additional hardware, Panel receptacle connectors snap and lock into panel cutouts and cable plugs quick connect and disconnect with positive retention locks.

Cable plug connectors also feature pin-protection skirts, positive polarisation and can be supplied with or without integrated strain relief hoods.

Cable receptacle connectors (only with integrated strain relief hoods) are developed to mate with cable plug connectors thus offering solutions for cable to cable applications.

Features and benefits

- Available in 10 contact arrangements.
- Self mountable panel receptacle with positive housing retention.
- Cable plugs with retaining latches for positive locking.
- Cable plug has pin protection skirt to prevent damage of male contacts
- Positive polarization keys prevent mismatching.
- Cable plug and receptacle have integrated strain relief hood which can take a wide range of cables.
- Cable plug and receptacle have discrimination cavities in between contact cavities, thus offering discrimination without contact loss.



Performance characteristics

Operating temperature: -55°C to +105°C
 Insulation resistance: 5000 MΩ min.
 Test potential: 2000 VAC
 Durability: 500 matings and unmatings.

Construction

Material : Polyamide 6.6
 Flammability rating : UL94-V2

Contact accommodation

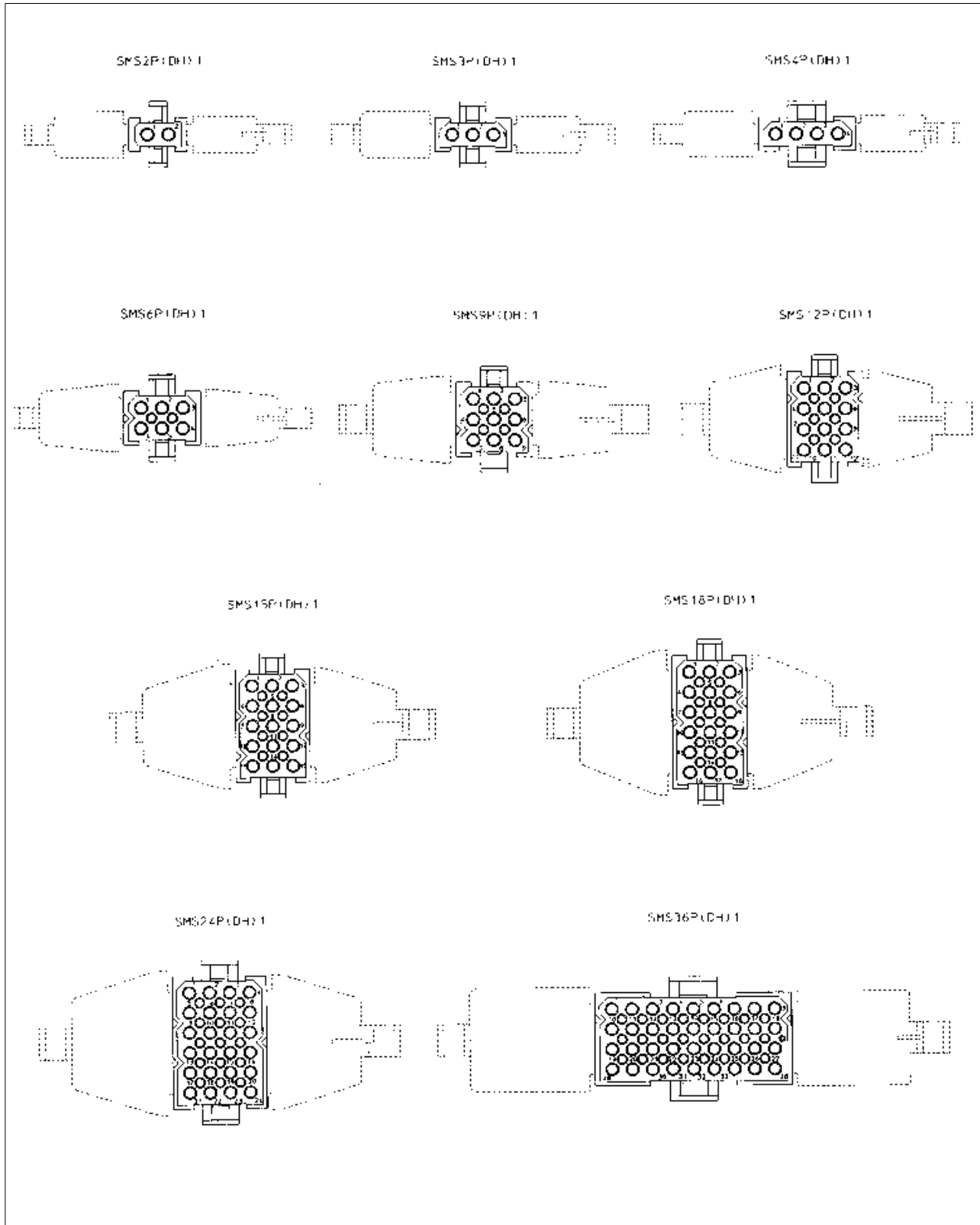
- “SMS” Qikmate connectors accept Trim-Trio removable snap-lock contacts (see contact section)
- Contacts to be ordered separately.

How to order

| | | | |
|----------------------------|---|----------|------------|
| Connector family | SMS SMS | 12 12 | PDH1 P1 |
| Contact arrangement | | | |
| Body variation: | R1: Panel mount receptacle P1: Cable plug without strain relief hood PDH1: Cable plug with integrated strain relief hood RDH1: Cable receptacle with integrated strain relief hood | | |



Contact arrangements for cable plug connectors (SMS--P1 and SMS--PDH1)

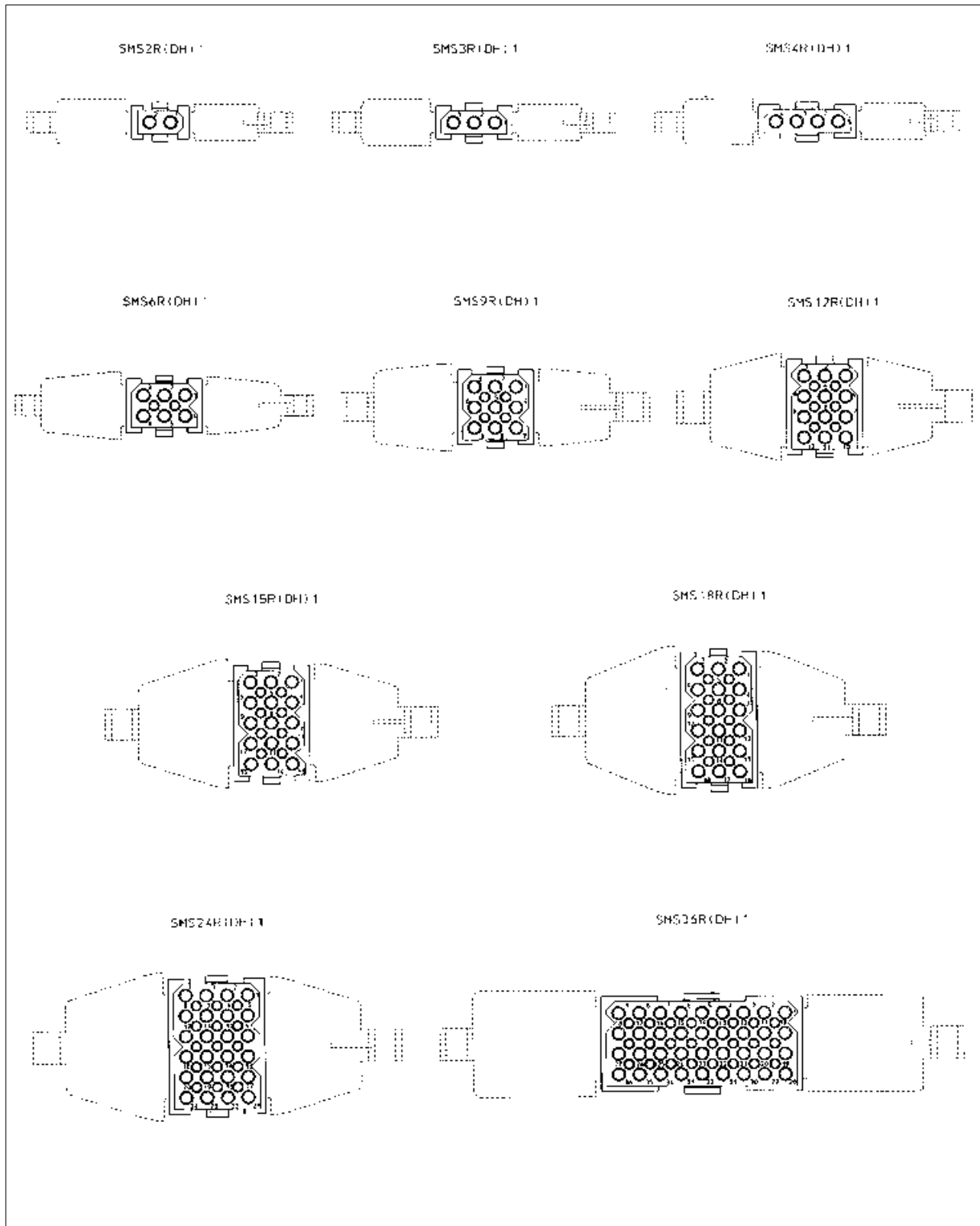


SMS

Contact identifications shown are for mating face. Contact identifications of wiring face are identical as shown on the receptacle arrangements



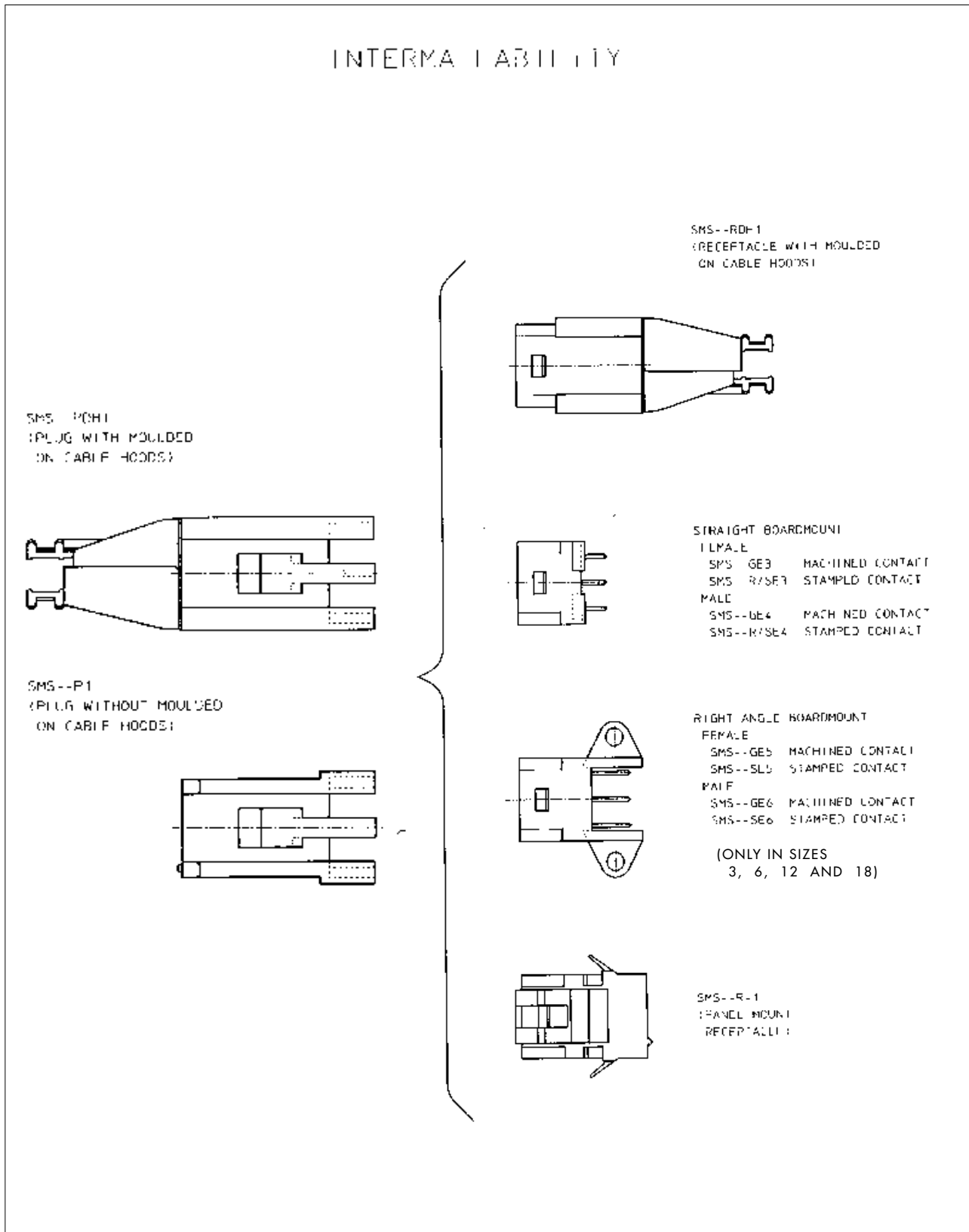
Contact arrangements for cable and panel mount receptacle connectors (SMS--R1 and SMS--RDH1)



Contact identifications shown are for mating face. Contact identifications of wiring face are identical as shown on the plug arrangements



SMS - Standard Qikmate intermateability chart

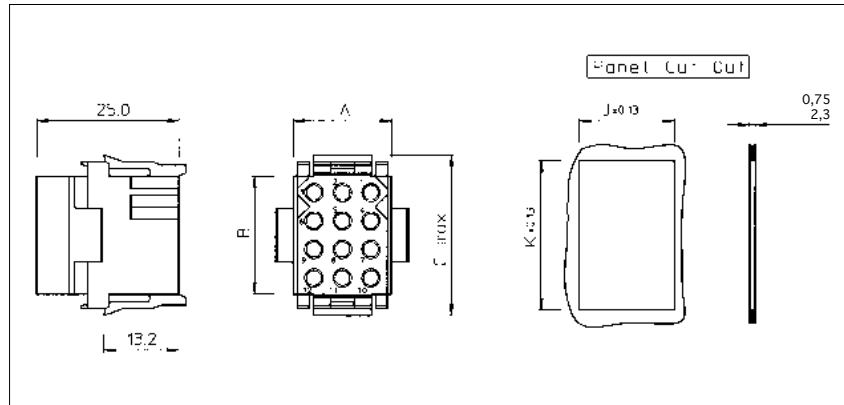
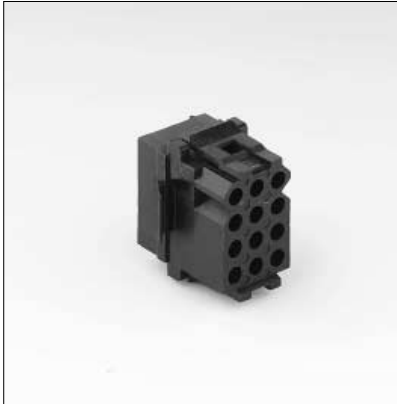


SMS

SMS - Qikmate

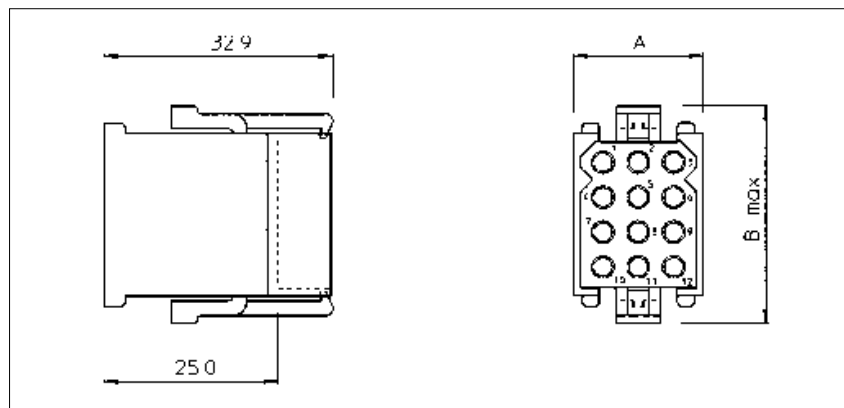


Panel mount receptacle (SMS--R1)



| Part number | Number of contact pos. | A | B | C max. | J ±0.13 | K ±0.13 |
|-------------|------------------------|------|------|--------|---------|---------|
| SMS2R1 | 2 | 11.0 | 5.8 | 15.2 | 11.4 | 11.6 |
| SMS3R1 | 3 | 16.2 | | | 16.5 | |
| SMS4R1 | 4 | 21.2 | | | 21.7 | |
| SMS6R1 | 6 | 16.2 | 10.9 | 20.3 | 16.5 | 16.7 |
| SMS9R1 | 9 | | 16.0 | 25.4 | 16.7 | 21.6 |
| SMS12R1 | 12 | | 21.1 | 30.5 | | 26.7 |
| SMS15R1 | 15 | | 26.2 | 35.6 | | 31.8 |
| SMS18R1 | 18 | | 31.2 | 40.6 | 21.7 | 36.9 |
| SMS24R1 | 24 | | 21.2 | 21.1 | | 30.5 |
| SMS36R1 | 36 | 46.6 | | | 47.1 | |

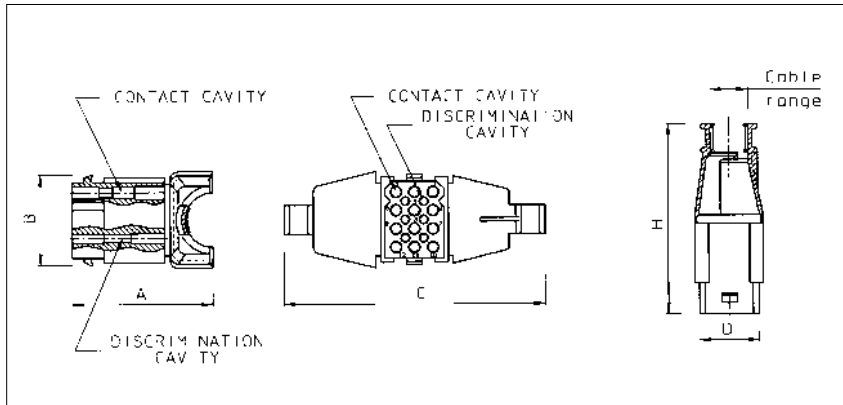
Cable plug without strain relief hood (SMS--P1)



| Part number | Number of contact pos. | A | C max. |
|-------------|------------------------|------|--------|
| SMS2P1 | 2 | 15.0 | 17.8 |
| SMS3P1 | 3 | 18.6 | |
| SMS4P1 | 4 | 23.7 | |
| SMS6P1 | 6 | 18.6 | 22.9 |
| SMS9P1 | 9 | | 27.9 |
| SMS12P1 | 12 | | 33.0 |
| SMS15P1 | 15 | | 38.1 |
| SMS18P1 | 18 | | 43.2 |
| SMS24P1 | 24 | | 23.7 |
| SMS36P1 | 36 | 49.1 | |



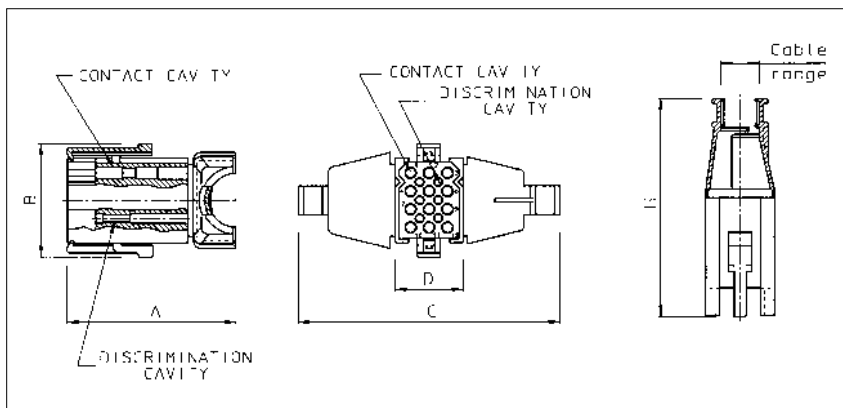
Cable receptacle with integrated strain relief hood (SMS--RDH1)



| Part number | Number of contact pos. | Number of discrimination pos. | A | B | C | D | H | Cable range | Recommended unrap cable te |
|-------------|------------------------|-------------------------------|------|------|-------|------|------|-------------|----------------------------|
| SMS2RDH1 | 2 | 0 | 31.6 | 9.9 | 64.8 | 11.1 | 49.2 | 0.5 - 8.4 | TF4D |
| SMS3RDH1 | 3 | 0 | 35.1 | | 69.0 | 16.2 | | 0.8 - 7.3 | |
| SMS4RDH1 | 4 | 0 | 38.2 | | 74.4 | 21.2 | | 1.5 - 10.0 | |
| SMS6RDH1 | 6 | 2 | 34.6 | 15.0 | 72.6 | 16.2 | 50.9 | 1.7 - 9.2 | TF5D |
| SMS9RDH1 | 9 | 4 | 35.8 | 20.0 | 75.3 | | 52.2 | 3.9 - 14.3 | |
| SMS12RDH1 | 12 | 6 | 38.1 | 25.1 | 72.0 | | 52.7 | 4.0 - 15.0 | |
| SMS15RDH1 | 15 | 8 | 35.9 | 30.2 | 81.3 | | 55.2 | 5.0 - 16.2 | |
| SMS18RDH1 | 18 | 10 | 36.1 | 35.3 | 90.4 | | 21.2 | 5.8 - 20.3 | |
| SMS24RDH1 | 24 | 15 | 39.7 | 39.7 | | 57.2 | | 7.1 - 20.4 | |
| SMS36RDH1 | 36 | 24 | 54.6 | 25.1 | 128.0 | 46.6 | 63.3 | 8.8 - 24.5 | |

SMS

Cable plug with integrated strain relief hood (SMS--PDH1)

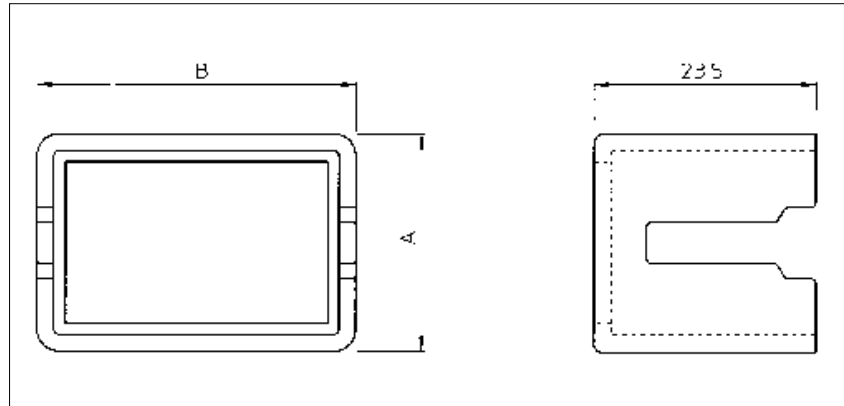


| Part number | Number of contact pos. | Number of discrimination pos. | A | B | C | D | H | Cable range | Recommended unrap cable te |
|-------------|------------------------|-------------------------------|------|------|-------|------|------|-------------|----------------------------|
| SMS2PDH1 | 2 | 0 | 39.5 | 16.4 | 64.8 | 14.1 | 57.1 | 0.5 - 8.4 | TF4D |
| SMS3PDH1 | 3 | 0 | 43.0 | | 69.0 | 18.6 | | 0.8 - 7.3 | |
| SMS4PDH1 | 4 | 0 | 46.1 | | 74.4 | 23.7 | | 1.5 - 10.0 | |
| SMS6PDH1 | 6 | 2 | 42.5 | 21.5 | 72.6 | 18.6 | 58.8 | 1.7 - 9.2 | TF5D |
| SMS9PDH1 | 9 | 4 | 43.7 | 26.7 | 75.3 | | 60.1 | 3.9 - 14.3 | |
| SMS12PDH1 | 12 | 6 | 46.0 | 31.7 | 72.0 | | 60.6 | 4.0 - 15.0 | |
| SMS15PDH1 | 15 | 8 | 43.8 | 36.7 | 81.3 | | 63.1 | 5.0 - 16.2 | |
| SMS18PDH1 | 18 | 10 | 44.0 | 41.8 | 90.4 | | 23.7 | 5.8 - 20.3 | |
| SMS24PDH1 | 24 | 15 | 47.6 | 47.6 | | 65.1 | | 7.1 - 20.4 | |
| SMS36PDH1 | 36 | 24 | 62.5 | 31.7 | 128.0 | 49.1 | 71.2 | 8.8 - 24.5 | |



Accessories for standard Qikmate connectors

Pin protection shroud for panel mount receptacle (SMS--CSB1)



When pins are inserted into the panelmount receptacle half (SMS--R1) of the QIKMATE connector, an optional pin protection shroud can be installed.

The shroud is mounted at the same time as the receptacle by holding the shroud against the mating side of the panel with both cutouts lined up. The receptacle is then inserted in place, trapping the shroud between the receptacle and panel. The use of the pin protection shroud reduces the allowable thickness of the panel from 2.3 to 1.6 mm max.

| Part number | Number of contact positions | A | B |
|-------------|-----------------------------|------|------|
| SMS2CSB1 | 2 | 19.8 | 18.8 |
| SMS3CSB1 | 3 | 23.4 | |
| SMS4CSB1 | 4 | 28.4 | |
| SMS6CSB1 | 6 | 23.4 | 23.9 |
| SMS9CSB1 | 9 | | 29.0 |
| SMS12CSB1 | 12 | | 34.0 |
| SMS15CSB1 | 15 | | 39.1 |
| SMS18CSB1 | 18 | | 44.2 |
| SMS24CSB1 | 24 | 28.4 | |
| SMS36CSB1 | 36 | 54.1 | 34.0 |

Strain relief hoods (SMS—H1)



Separate strain relief hoods are available for all standard plugs SMS—P1.

The hoods consist of identical halves that snap into position on the plug and are secured in place with the cable tie drawn tightly around the cable entry collar.

Catalog numbers designate a complete hood (2 halves) SMS—H1

The cable tie is not included (TF4D – TF5D)

Two three and four position hoods are single piece units

Discrimination pins

For discrimination pins on both standard Qikmate and Qikmate Pin Headers cable and boardmount:
See accessories section.

SMS - Boardmount Qikmate



Qikmate PC-boardmount connectors

Description

These PC boardmount connectors enable QIKMATE and preassembled TRIM TRIO contacts to be PC board mounted, using conventional solder production techniques. They will then mate and latch with the standard QIKMATE plugs.

Straight boardmount QIKMATE is available in 10 insert arrangements from 2 to 36 positions.

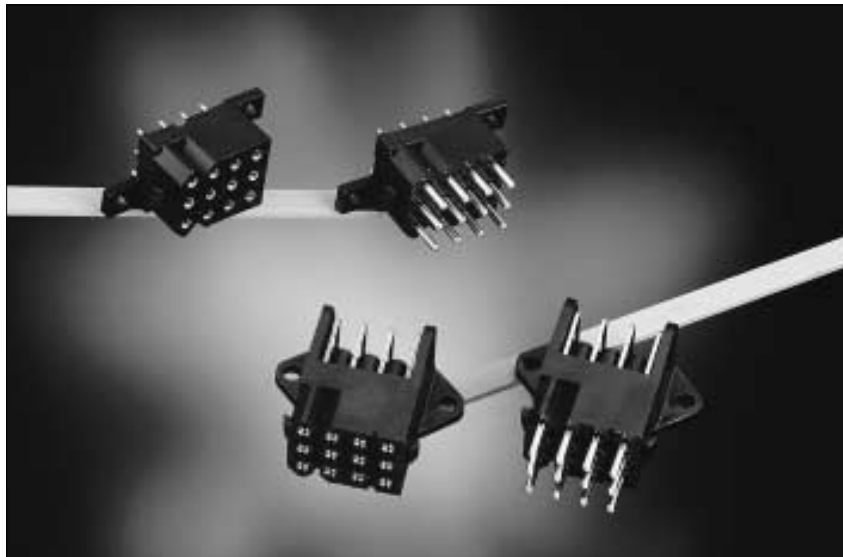
Right-angled boardmount QIKMATE is available in 3, 6, 12 and 18 positions.

All boardmount connectors are supplied fully loaded with pin or socket contacts, either in solid machined or stamped and formed contacts.

Stamped and formed contact have selective tin plating on the solder tails, thus eliminating flux operations.

Features and benefits

- Straight versions available in 10 contact arrangements from 2 to 36 positions
- Right-angled versions available in 3, 6, 12 and 18 positions.
- All versions are available with:
 - Pin or socket contacts
 - Stamped and formed or solid machined contacts.
- Some boardmount connectors have discrimination cavities in between contact cavities, thus offering discrimination without contact loss.



Performance characteristics

| | |
|------------------------|----------------------------|
| Operating temperature: | -55°C to +125°C |
| Insulation resistance: | 5000 MΩ min. |
| Test potential: | 2000 VAC |
| Current rating: | 5 Amp |
| Durability: | 500 matings and unmatings. |

Construction

| | |
|-----------------|-------------------------------------|
| Connector body: | Glass filled thermoplast UL94-V0 |
| Contacts: | High conductive copper alloy |

Plating table

Plating for solid machined contacts:
No digit (std) = Min. 0.4μ Gold all over, over Nickel.
 T = 3 - 5μ Tin all over

Plating for Stamped and formed contacts :
K9 (std) = Min. 0.4μ Gold in contact area, 3 - 5μ Tin on solder tail.
 T = 3 - 5μ Tin all over

Intermateability

- "SMS" Qikmate boardmount connectors with preassembled TRIM TRIO boardmount contacts are intermateable only with the "SMS" Qikmate cable plug connectors equipped with TRIM TRIO crimp type removable snap-lock contacts (see contact section)

SMS

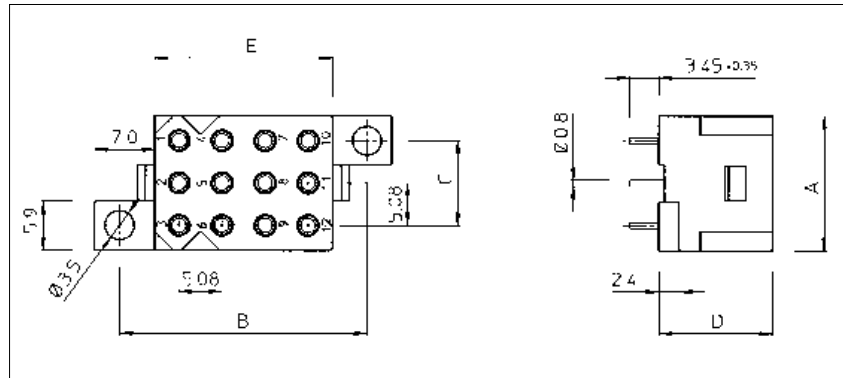
How to order

| | | | | | |
|----------------------------|--|-----------|-----------|----------|-----------|
| Connector family | SMS | 12 | GE | 3 | - |
| | SMS | 12 | SE | 3 | K9 |
| Contact arrangement | | | | | |
| Contact type: | GE: Solid machined contacts SE: Stamped and formed contacts | | | | |
| Design variation: | 3: Straight boardmount with female contacts 4: Straight boardmount with male contacts 5: Right angle boardmount with female contacts 6: Right angle boardmount with male contacts | | | | |
| Plating indication | | | | | |

SMS - Boardmount Qikmate



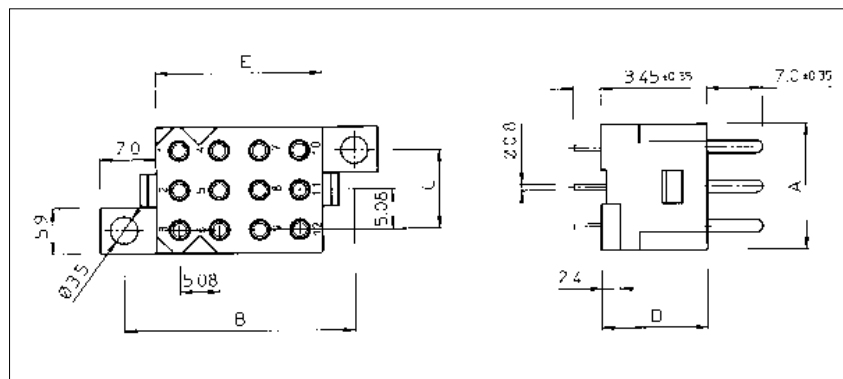
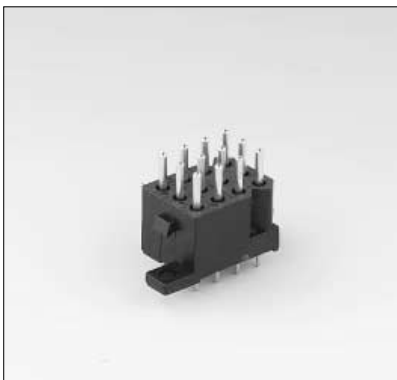
Straight boardmount with female contacts (SMS--GE3 / SMS--SE3K9)



| Part number Solid machined contacts | Part number Stamped and formed contacts | Number of contact pos. | Number of discrimination pos. | A | B | C | D | E |
|---|---|---------------------------|-------------------------------------|------|------|------|------|------|
| SMS2GE3 | SMS2SE3K9 | 2 | 0 | 11.0 | - | 19.1 | 13.4 | 5.9 |
| SMS3GE3 | SMS3SE3K9 | 3 | 0 | 16.2 | 14.0 | 10.2 | | |
| SMS4GE3 | SMS4SE3K9 | 4 | 0 | 21.3 | | 15.2 | | |
| SMS6GE3 | SMS6SE3K9 | 6 | 0 | 16.2 | 19.2 | 10.2 | | 10.9 |
| SMS9GE3 | SMS9SE3K9 | 9 | 4 | | 24.2 | | | 16.0 |
| SMS12GE3 | SMS12SE3K9 | 12 | 0 | | 29.2 | | | 21.1 |
| SMS15GE3 | SMS15SE3K9 | 15 | 8 | | 34.3 | | | 26.1 |
| SMS18GE3 | SMS18SE3K9 | 18 | 10 | | 39.4 | | | 31.2 |
| SMS24GE3 | SMS24SE3K9 | 24 | 0 | 21.2 | | 15.2 | | 20.9 |
| SMS36GE3 | SMS36SE3K9 | 36 | 0 | 46.5 | 15.2 | 54.6 | | |

For other platings: see plating table

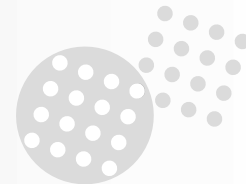
Straight boardmount with male contacts (SMS--GE4 / SMS--SE4K9)



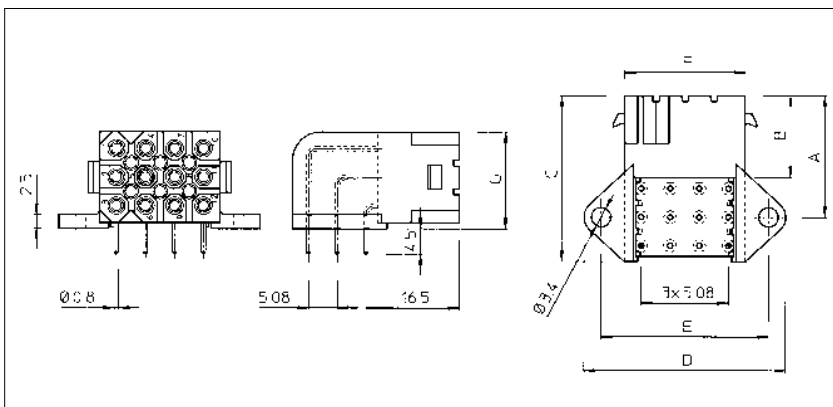
| Part number Solid machined contacts | Part number Stamped and formed contacts | Number of contact pos. | Number of discrimination pos. | A | B | C | D | E |
|---|---|---------------------------|-------------------------------------|------|------|------|------|------|
| SMS2GE4 | SMS2SE4K9 | 2 | 0 | 11.1 | - | 19.1 | 13.4 | 5.9 |
| SMS3GE4 | SMS3SE4K9 | 3 | 0 | 16.2 | 14.0 | 10.2 | | |
| SMS4GE4 | SMS4SE4K9 | 4 | 0 | 21.3 | | 15.2 | | |
| SMS6GE4 | SMS6SE4K9 | 6 | 0 | 16.2 | 19.2 | 10.2 | | 10.9 |
| SMS9GE4 | SMS9SE4K9 | 9 | 4 | | 24.2 | | | 16.0 |
| SMS12GE4 | SMS12SE4K9 | 12 | 0 | | 29.2 | | | 21.1 |
| SMS15GE4 | SMS15SE4K9 | 15 | 8 | | 34.3 | | | 26.1 |
| SMS18GE4 | SMS18SE4K9 | 18 | 10 | | 39.4 | | | 31.2 |
| SMS24GE4 | SMS24SE4K9 | 24 | 0 | 21.2 | | 15.2 | | 20.9 |
| SMS36GE4 | SMS36SE4K9 | 36 | 0 | 46.5 | 15.2 | 54.6 | | |

For other platings: see plating table

SMS - Boardmount Qikmate



Right angle boardmount with female contacts (SMS--GE5 / SMS--SE5K9)

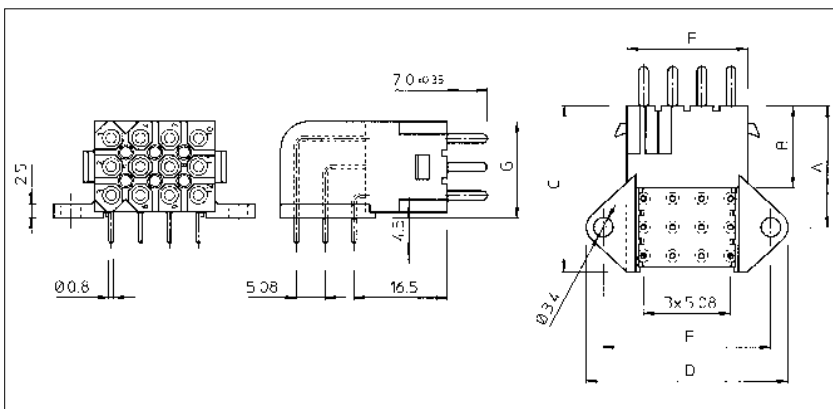


| Part number Solid machined contacts | Part number Stamped and formed contacts | Number of contact pos. | Number of discrimination pos. | A | B | C | D | E | F | G |
|---|---|---------------------------|-------------------------------------|------|------|------|------|------|------|------|
| SMS3GE5 | SMS3SE5K9 | 3 | 0 | 16.5 | 14.4 | 20.5 | 30.2 | 24.2 | 16.2 | 6.8 |
| SMS6GE5 | SMS6SE5K9 | 6 | 0 | 19.0 | | 24.5 | | | | 11.9 |
| SMS12GE5 | SMS12SE5K9 | 12 | 6 | 21.6 | | 29.5 | | | | 35.2 |
| SMS18GE5 | SMS18SE5K9 | 18 | 10 | | | | 45.4 | 39.4 | 31.2 | |

For other platings: see plating table

SMS

Right angle boardmount with male contacts (SMS--GE6 / SMS--SE6K9)



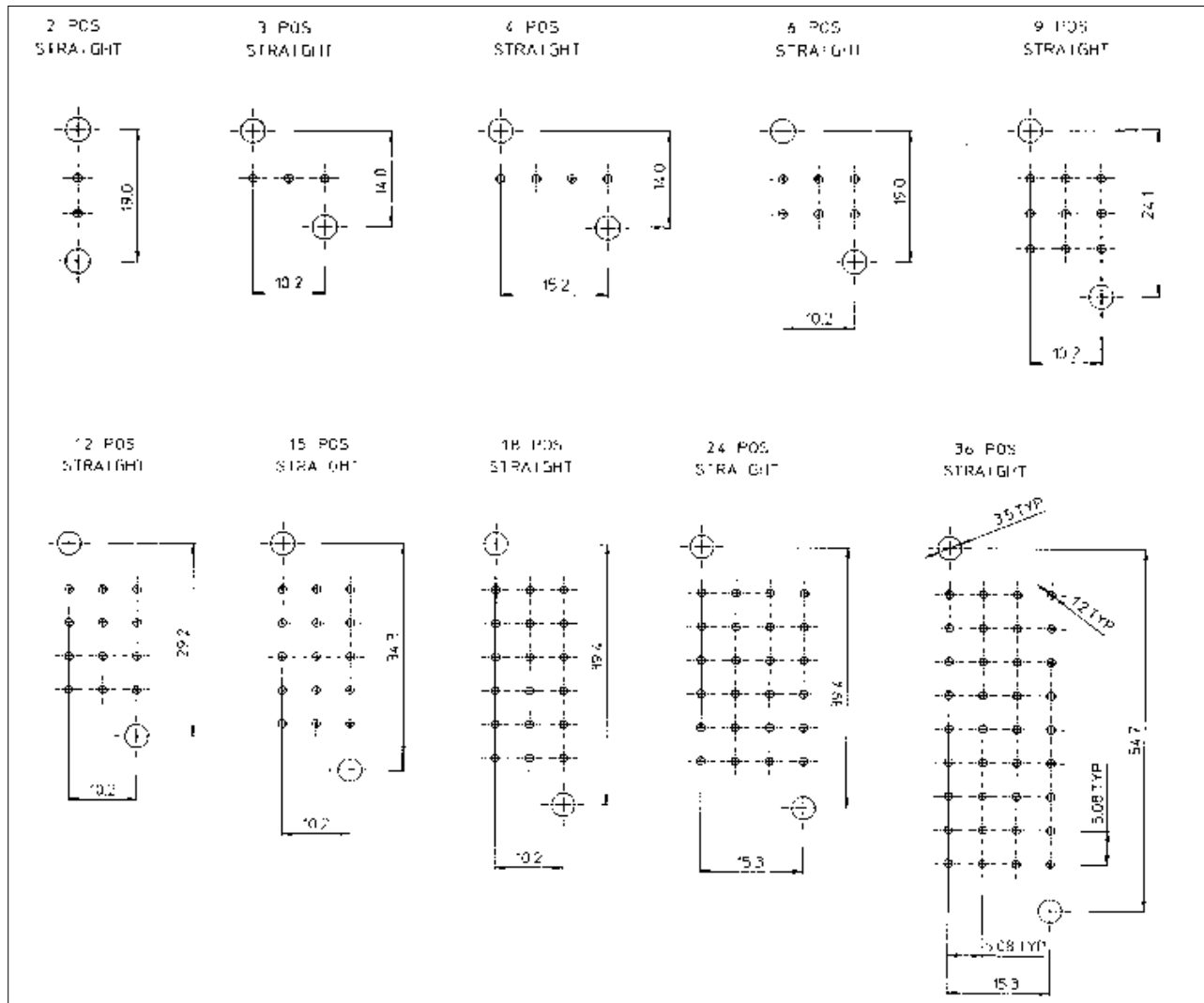
| Part number Solid machined contacts | Part number Stamped and formed contacts | Number of contact pos. | Number of discrimination pos. | A | B | C | D | E | F | G |
|---|---|---------------------------|-------------------------------------|------|------|------|------|------|------|------|
| SMS3GE6 | SMS3SE6K9 | 3 | 0 | 16.5 | 14.4 | 20.5 | 30.2 | 24.2 | 16.2 | 6.8 |
| SMS6GE6 | SMS6SE6K9 | 6 | 0 | 19.0 | | 24.5 | | | | 11.9 |
| SMS12GE6 | SMS12SE6K9 | 12 | 6 | 21.6 | | 29.5 | | | | 35.2 |
| SMS18GE6 | SMS18SE6K9 | 18 | 10 | | | | 45.4 | 39.4 | 31.2 | |

For other platings: see plating table

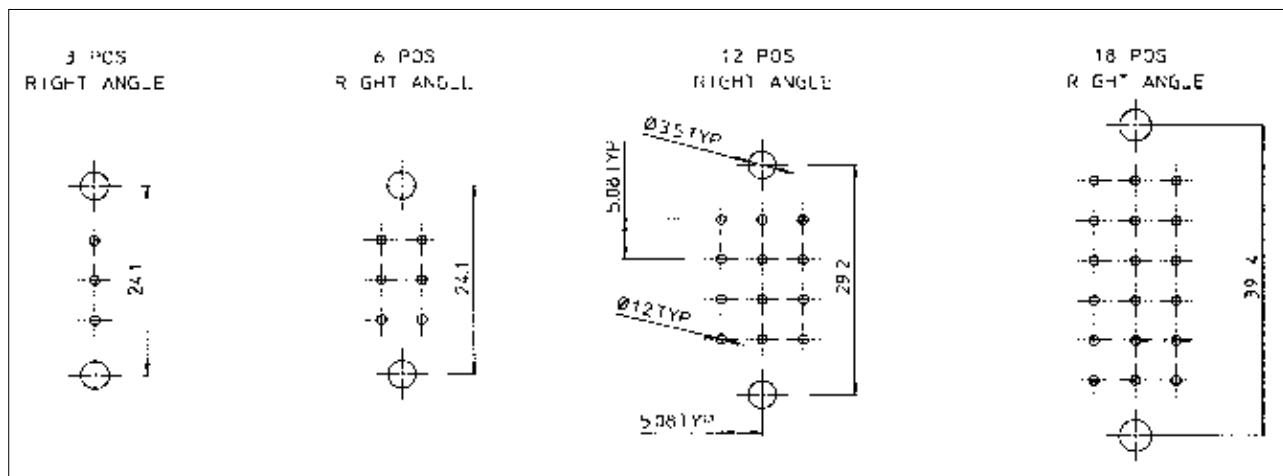
SMS - Boardmount Qikmate



Recommended PC-Board hole lay out for straight male and female boardmount connectors



Recommended PC-Board hole lay out for right-angled male and female boardmount connectors



SMS - Qikmate Pin Header



Qikmate PC boardmount Pin Headers and plugs

Description

Qikmate Pin Header, available in 3, 4, 6, 9 and 10 positions, provides the additional versatility of straight and right angle board mounting.

Offered as an alternative to stacked connectors, the in-line contact design of the pin header provides the user with significant PC board space savings.

The boardmount receptacle features positive polarization and a moulded on pin protection skirt and is supplied preassembled with straight or right angled:

- Solid machined or stamped and formed PC board pin contacts.
- Coax PC board pin contacts.

The socket cable plug features positive quick connect / disconnect latches and is designed to accept N° 16 TRIM TRIO .0625" (1.6mm) diameter socket contacts for maximum contact protection.

Features and benefits

- Available in 3, 4, 6, 9 and 10 positions.
- In-line contact design, offering significant PC board space savings.
- Boardmount connectors available in straight and right-angled version preassembled with:
 - Solid machined or stamped and formed pin contacts.
 - Coax pin contacts.

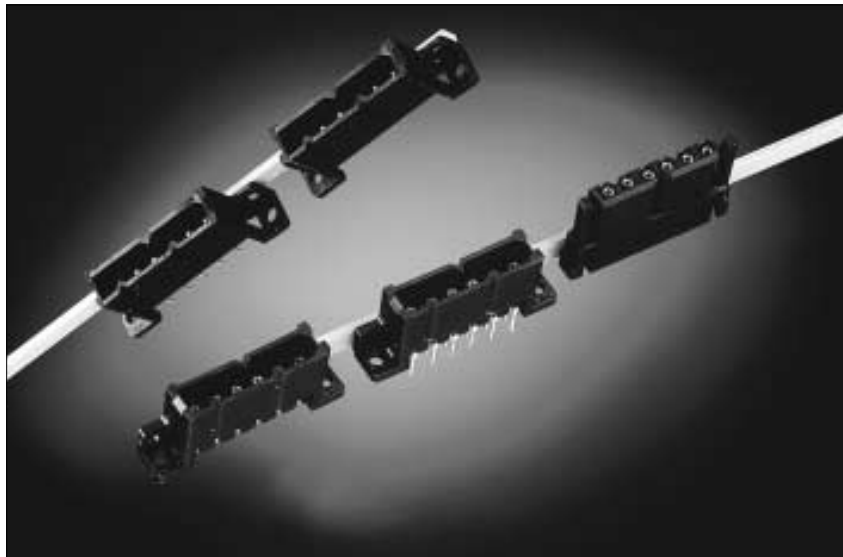
Construction

Connector body:

Glass filled thermoplast UL94-V0

Colour: Black

Contacts: High conductive copper alloy



Performance characteristics

Operating

temperature: -55°C to +125°C

Insulation

resistance: 5000 MΩ min.

Test potential: 2000 VAC

Current rating: 5 AMP

Durability: 500 matings and unmatings.

Intermateability

- "SMS" Socket plugs accept Trim-Trio removable snap-lock contacts (see contact section)
- Contacts to be ordered separately.

Plating table

Plating for solid machined contacts:

No digit (std) = Min. 0.4μ Gold all over, over Nickel.

T = 3 - 5μ Tin all over

Plating for Stamped and formed contacts :

D28 = Min. 0.75μ Au over nickel.

D70 = Gold flash all over

TR29 = 1.2μ Pre-plated Tin all over.

Plating for coax contacts:

Z17 = Min. 0.75μ Au in contact area,

Flash on solder tail (inner)

Min 0.75μ Au in contact area,

Tin on solder tail (outer)

How to order

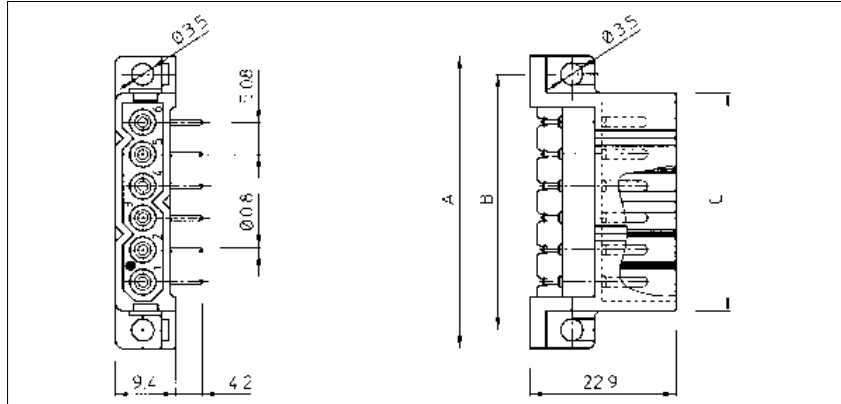
| Connector family | SMS | 9 | PH | 3 | TR29 |
|----------------------------|-------------|---|----|---|------|
| | SMS | 9 | CH | 1 | Z17 |
| | SMS | 9 | P3 | - | - |
| Contact arrangement | | | | | |
| Contact type: | PH: | Pin header boardmount. | | | |
| | CH: | Coax header boardmount. | | | |
| | P3: | Socket cable plug for pin and coax boardmount header. | | | |
| Design variation: | 1: | Right angle coax header boardmount with male contacts. | | | |
| | 2: | Straight coax header boardmount with male contacts | | | |
| | 3: | Right angle pin header boardmount with stamped male contacts | | | |
| | 4: | Straight pin header boardmount with stamped male contacts | | | |
| | GE6: | Right angle pin header boardmount with machined male contacts | | | |
| | GE4: | Straight pin header boardmount with machined male contacts | | | |
| Plating indication | | | | | |

SMS

SMS - Qikmate Pin Header



Right angle pin header boardmount with male contacts (SMS--PH3 / SMS--PHGE6)

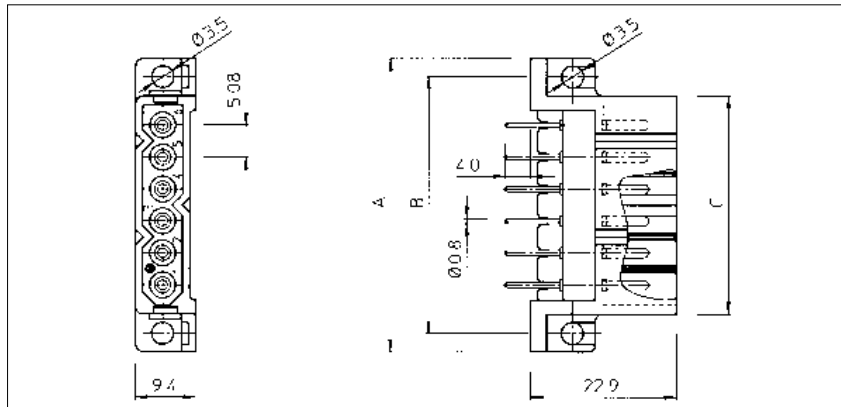


| Part number Stamped and formed contacts | Part number Solid machined contacts | Number of contact positions | A | B | C |
|---|---|-----------------------------------|------|------|------|
| SMS3PH3TR29 | SMS3PHGE6 | 3 | 31.2 | 25.4 | 19.3 |
| SMS4PH3TR29 | SMS4PHGE6 | 4 | 36.3 | 30.4 | 24.4 |
| SMS6PH3TR29 | SMS6PHGE6 | 6 | 46.5 | 40.6 | 34.5 |
| SMS9PH3TR29 | SMS9PHGE6 | 9 | 61.7 | 55.9 | 49.8 |
| SMS10PH3TR29 | SMS10PHGE6 | 10 | 66.8 | 61.0 | 54.9 |

For other platings: see plating table.

Other solder tail lengths on request

Straight pin header boardmount with male contacts (SMS--PH4 / SMS--PHGE4)



| Part number Stamped and formed contacts | Part number Solid machined contacts | Number of contact positions | A | B | C |
|---|---|-----------------------------------|------|------|------|
| SMS3PH4TR29 | SMS3PHGE4 | 3 | 31.2 | 25.4 | 19.3 |
| SMS4PH4TR29 | SMS4PHGE4 | 4 | 36.3 | 30.4 | 24.4 |
| SMS6PH4TR29 | SMS6PHGE4 | 6 | 46.5 | 40.6 | 34.5 |
| SMS9PH4TR29 | SMS9PHGE4 | 9 | 61.7 | 55.9 | 49.8 |
| SMS10PH4TR29 | SMS10PHGE4 | 10 | 66.8 | 61.0 | 54.9 |

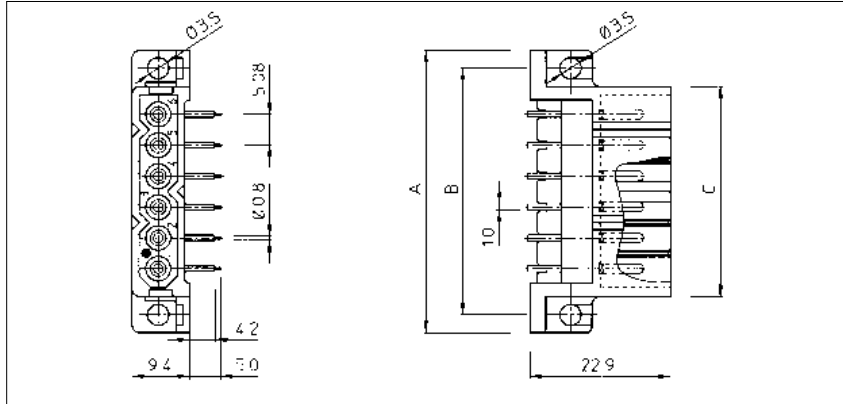
For other platings: see plating table.

Other solder tail lengths on request

SMS - Qikmate Pin Header



Right angle coax header boardmount with male contacts (SMS--CH1Z17)

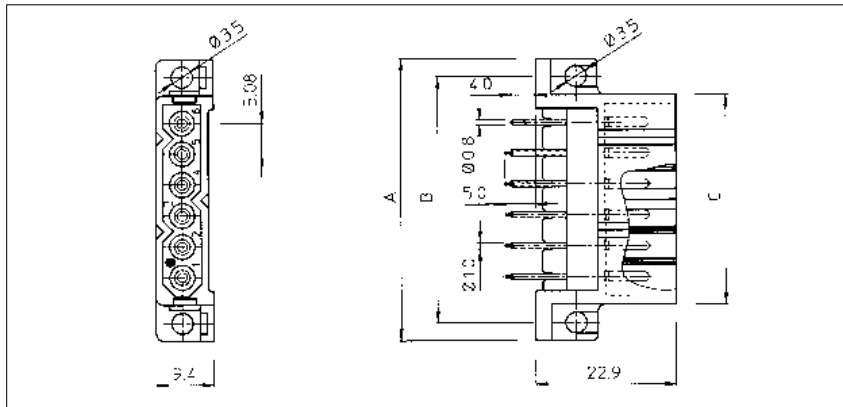


| Part number positions | Number of contact | A | B | C |
|-----------------------|-------------------|------|------|------|
| SMS3CH1Z17 | 3 | 31.2 | 25.4 | 19.3 |
| SMS4CH1Z17 | 4 | 36.3 | 30.4 | 24.4 |
| SMS6CH1Z17 | 6 | 46.5 | 40.6 | 34.5 |
| SMS9CH1Z17 | 9 | 61.7 | 55.9 | 49.8 |
| SMS10CH1Z17 | 10 | 66.8 | 61.0 | 54.9 |

For plating spec.: see plating table.

SMS

Straight coax header boardmount with male contacts (SMS--CH2Z17)



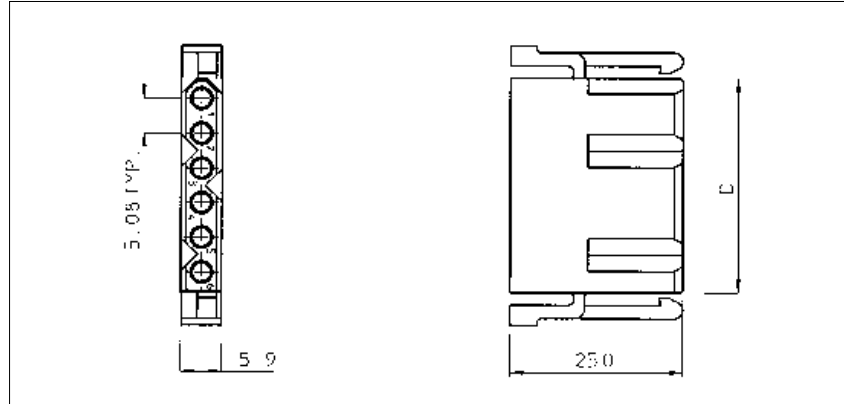
| Part number positions | Number of contact | A | B | C |
|-----------------------|-------------------|------|------|------|
| SMS3CH2Z17 | 3 | 31.2 | 25.4 | 19.3 |
| SMS4CH2Z17 | 4 | 36.3 | 30.4 | 24.4 |
| SMS6CH2Z17 | 6 | 46.5 | 40.6 | 34.5 |
| SMS9CH2Z17 | 9 | 61.7 | 55.9 | 49.8 |
| SMS10CH2Z17 | 10 | 66.8 | 61.0 | 54.9 |

For plating spec.: see plating table.

SMS - Qikmate Pin Header

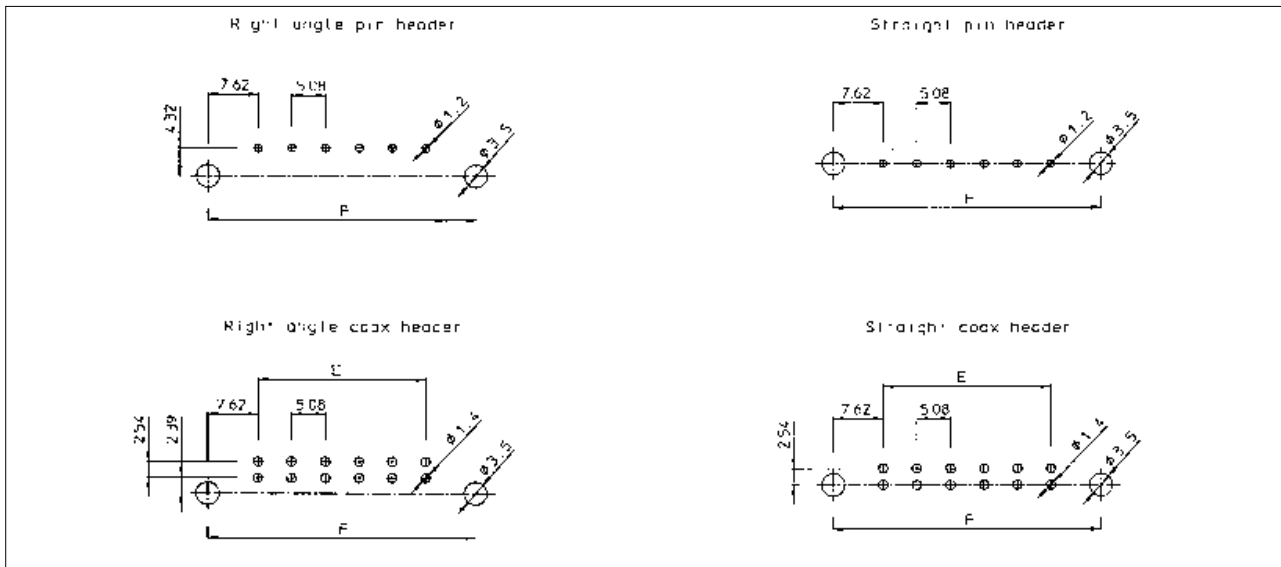


Socket cable plug for pin and coax boardmount header (SMS--P3)



| Part number | Number of contact positions | D |
|-------------|-----------------------------|------|
| SMS3P3 | 3 | 16.0 |
| SMS4P3 | 4 | 21.1 |
| SMS6P3 | 6 | 31.2 |
| SMS9P3 | 9 | 46.5 |
| SMS10P3 | 10 | 51.6 |

Recommended PC-board hole layouts



| Part number of contact positions | E | F |
|----------------------------------|-------|-------|
| 3 | 10.18 | 25.40 |
| 4 | 15.24 | 30.48 |
| 6 | 25.40 | 40.64 |
| 9 | 40.64 | 55.88 |
| 10 | 45.72 | 60.96 |