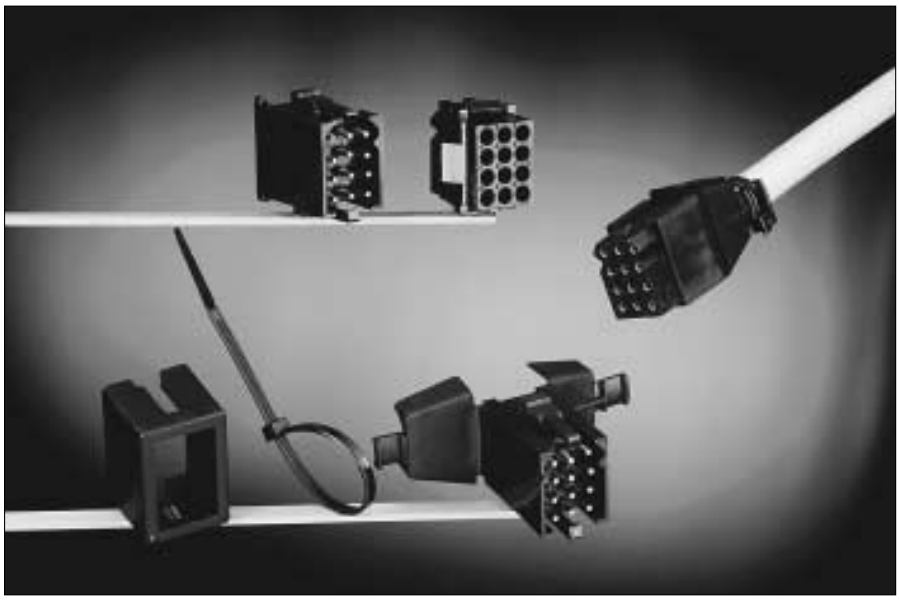
Qikmate panel and cable connectors

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 mismating.
- 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

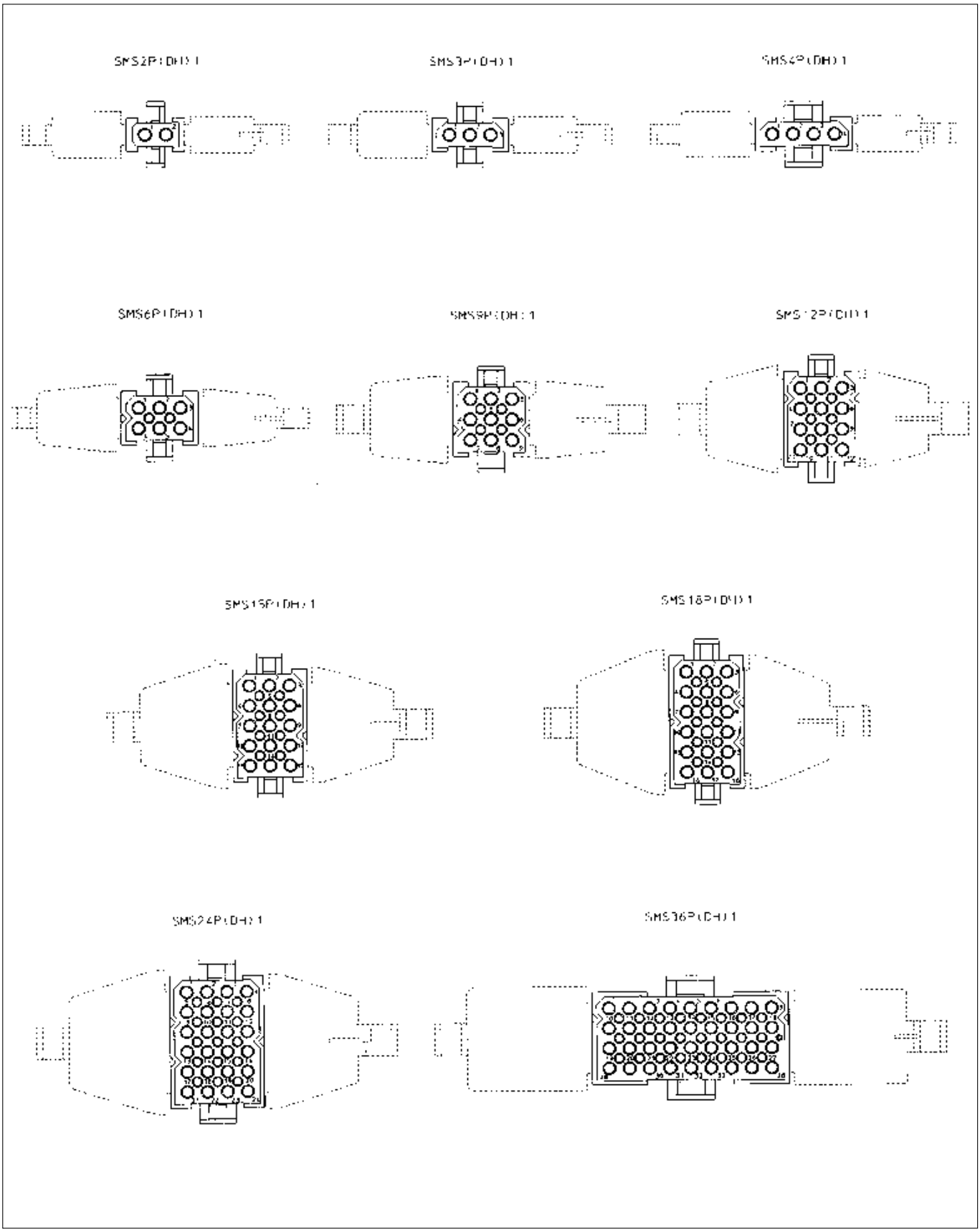
Contact accommodation

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

How to order

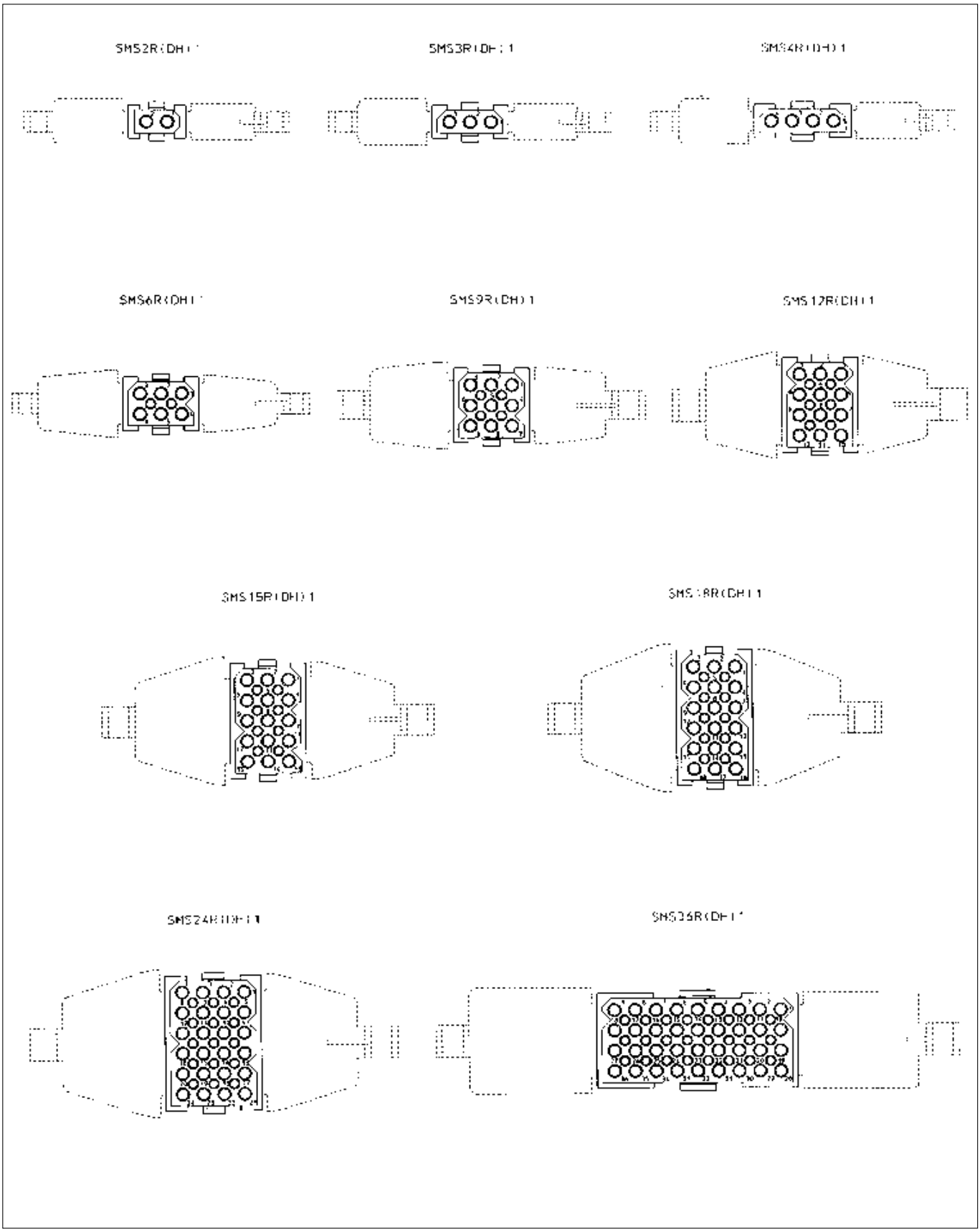
Connector family		**SMS** **SMS**	**12** **12**	**PDH1** **P1**
Contact arrangement				
Body variation:	**R1:** Panel mount receptacle **P1:** Cable plug without strain relief hood **PDH1:** Cable plug with integrated strain relief hood **RDH1:** Cable receptacle with integrated strain relief hood			

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



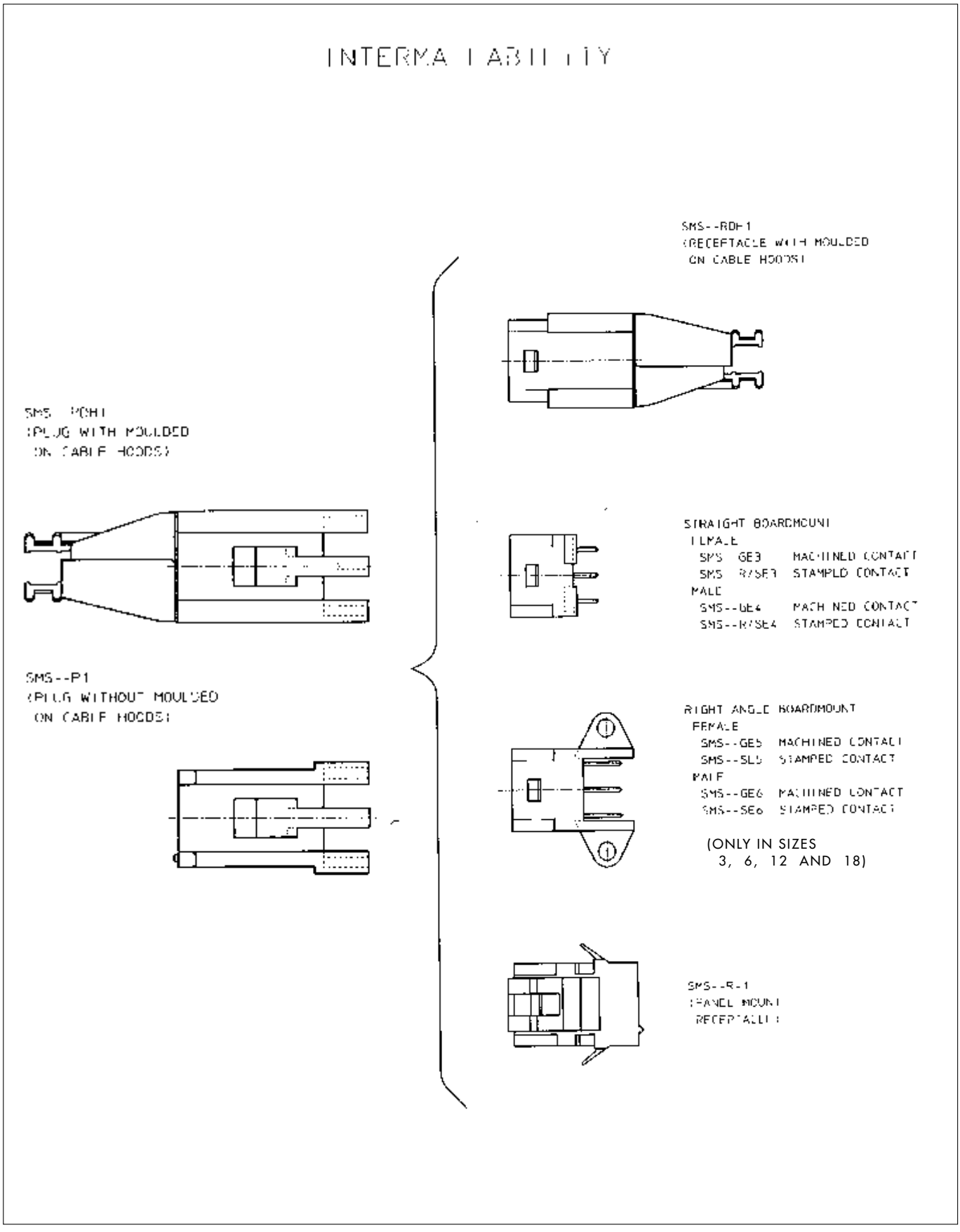
Contact identifications shown are for mating face. Contact identifications of wiring face are identical as shown on the receptacle arrangements

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

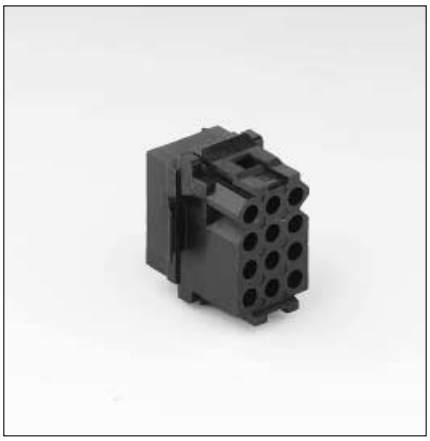


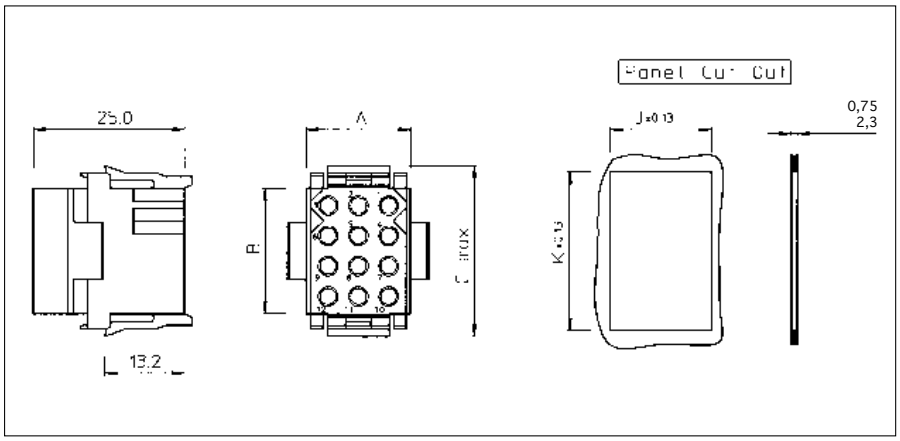
Contact identifications shown are for mating face. Contact identifications of wiring face are identical as shown on the plug arrangements

SMS - Standard Qikmate intermateability chart



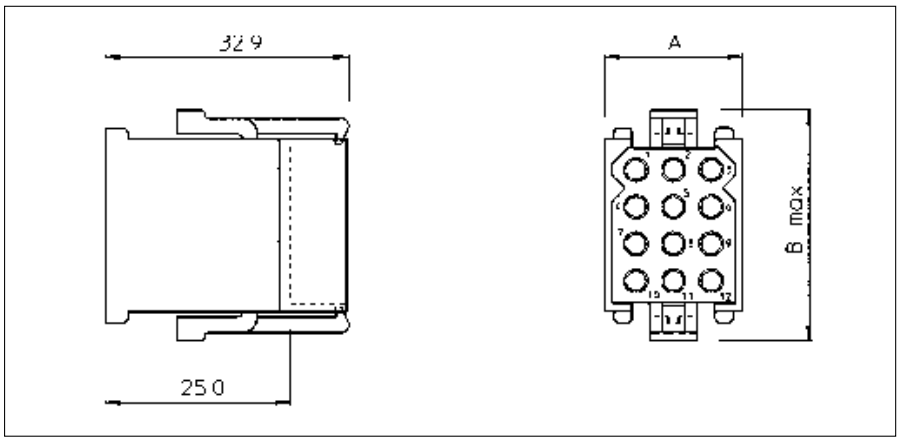
Panel mount receptacle (SMS--R1)





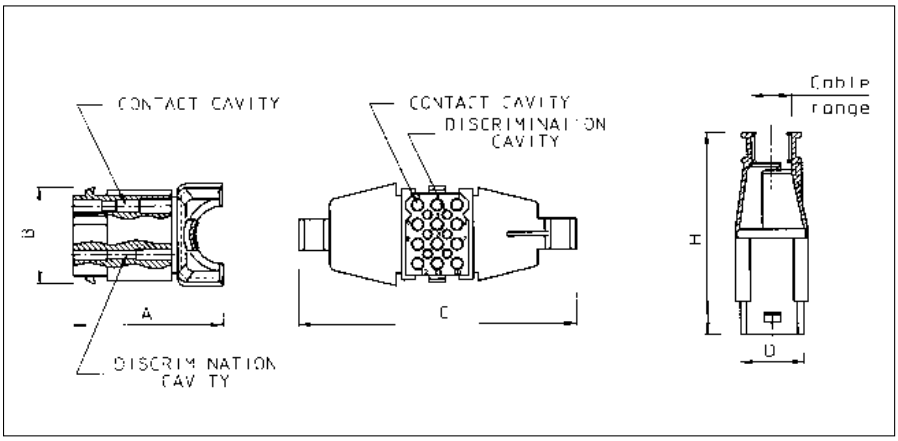
Part number	Number of contact pos.	A	B	C max.	J ±0.13	K ±0.13
SMS2R1	2	11.0	5.8	15.2	11.4	11.6
SMS3R1	3	16.2			16.5	
SMS4R1	4	21.2			21.7	
SMS6R1	6	16.2	10.9	20.3	16.5	16.7
SMS9R1	9		16.0	25.4		21.6
SMS12R1	12		21.1	30.5	16.7	26.7
SMS15R1	15		26.2	35.6		31.8
SMS18R1	18		31.2	40.6		36.9
SMS24R1	24	21.2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

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



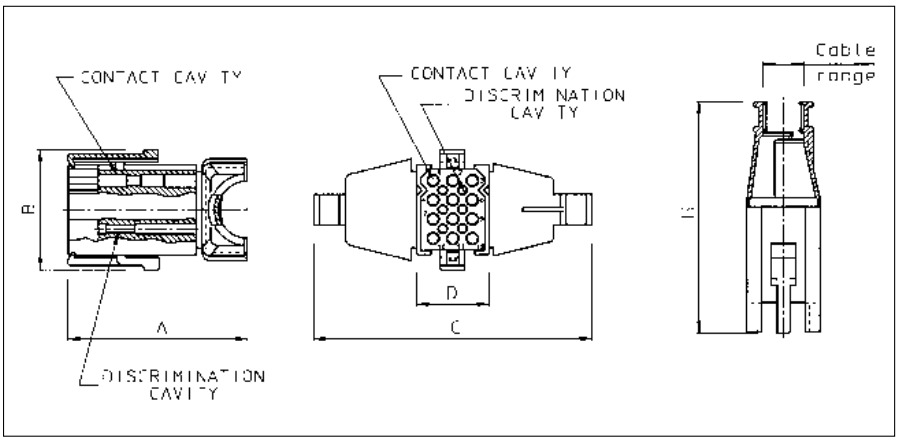
Part number	Number of contact pos.	A	C max.
SMS2P1	2	15.0	17.8
SMS3P1	3	18.6	
SMS4P1	4	23.7	
SMS6P1	6	18.6	22.9
SMS9P1	9		27.9
SMS12P1	12		33.0
SMS15P1	15		38.1
SMS18P1	18		43.2
SMS24P1	24	23.7	
SMS36P1	36	49.1	33.0

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



Part number	Number of contact pos.	Number of disrimination pos.	A	B	C	D	H	Cable range	Recommended unirap 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				5.8 - 20.3	
SMS24RDH1	24	15	39.7		90.4	21.2	57.2	7.1 - 20.4	
SMS36RDH1	36	24	54.6	25.1	128.0	46.6	63.3	8.8 - 24.5	

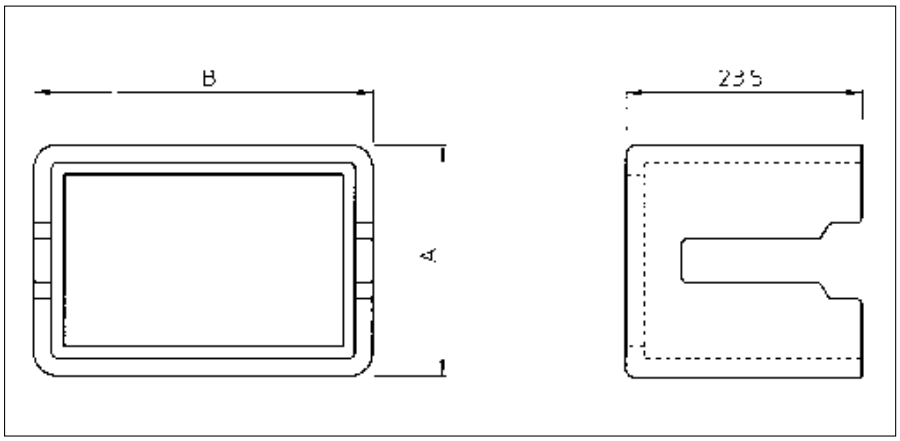
Cable plug with integrated strain relief hood (SMS--PDH1)



Part number	Number of contact pos.	Number of disrimination pos.	A	B	C	D	H	Cable range	Recommended unirap 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				5.8 - 20.3	
SMS24PDH1	24	15	47.6		90.4	23.7	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 cabe 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.

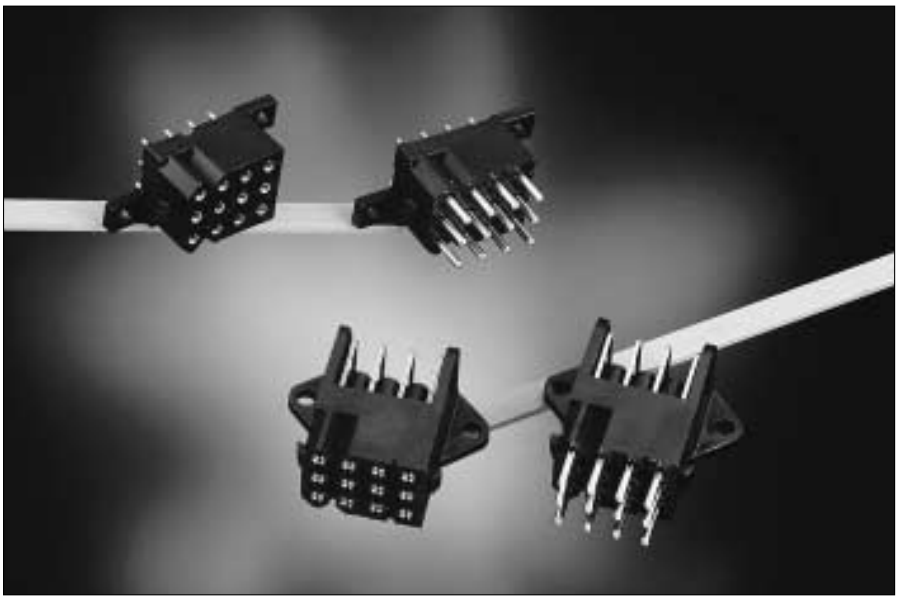
Qikmate PC-boardmount connectors

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

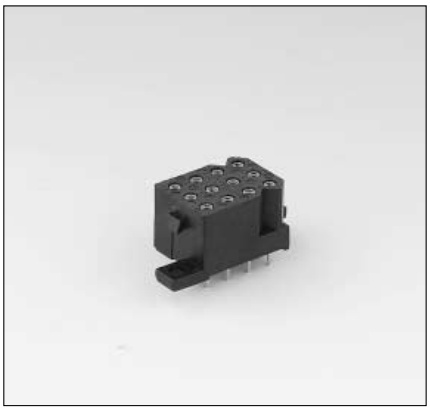
Intermateability

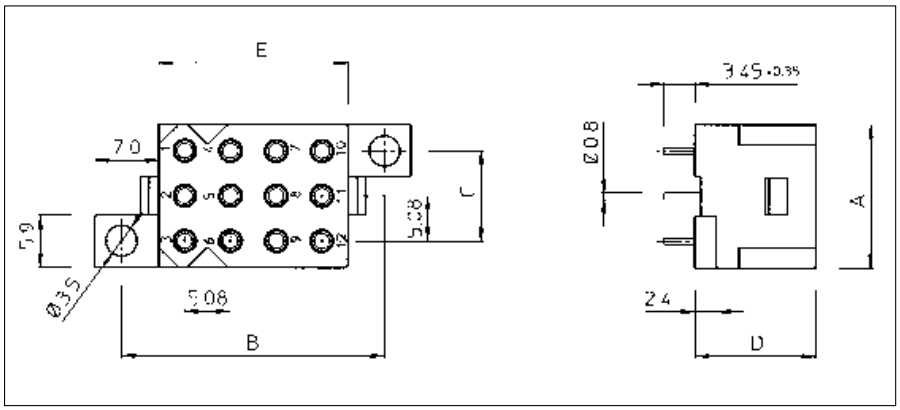
- "SMS" Qikmate boardmount connectors with preassembled TRIM TRIO boarmount contacts are intermateable only with the "SMS" Qikmate cable plug connectors equipped with TRIM TRIO crimp type removable snap-lock contacts (see contact section)

How to order

Connector family		**SMS** **SMS**	**12** **12**	**GE** **SE**	**3** **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						

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

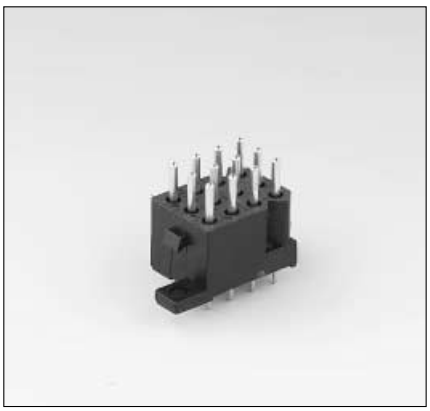


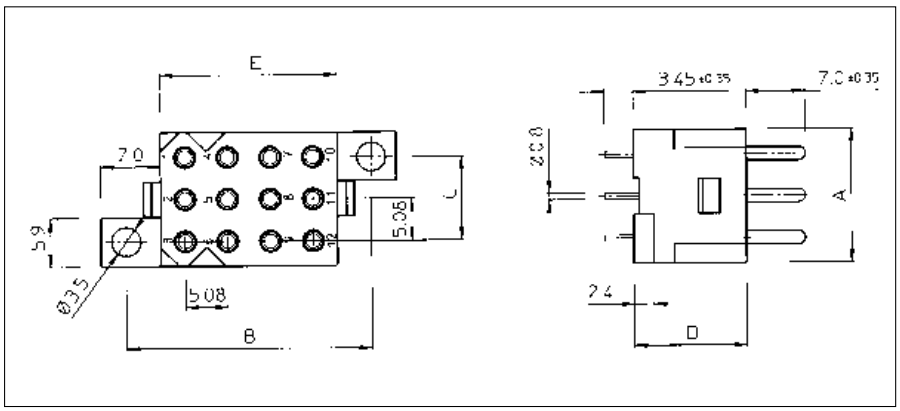


Part number Solid machined contacts	Part number Stamped and formed contacts	Number of contact pos.	Number of discrimination pos.	A	B	C	D	E
SMS2GE3	SMS2SE3K9	2	0	11.0	-	19.1	13.4	5.9
SMS3GE3	SMS3SE3K9	3	0	16.2	14.0	10.2		
SMS4GE3	SMS4SE3K9	4	0	21.3		15.2		
SMS6GE3	SMS6SE3K9	6	0	16.2	19.2	10.2		10.9
SMS9GE3	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		
SMS36GE3	SMS36SE3K9	36	0	46.5	15.2	54.6		20.9

For other platings: see plating table

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

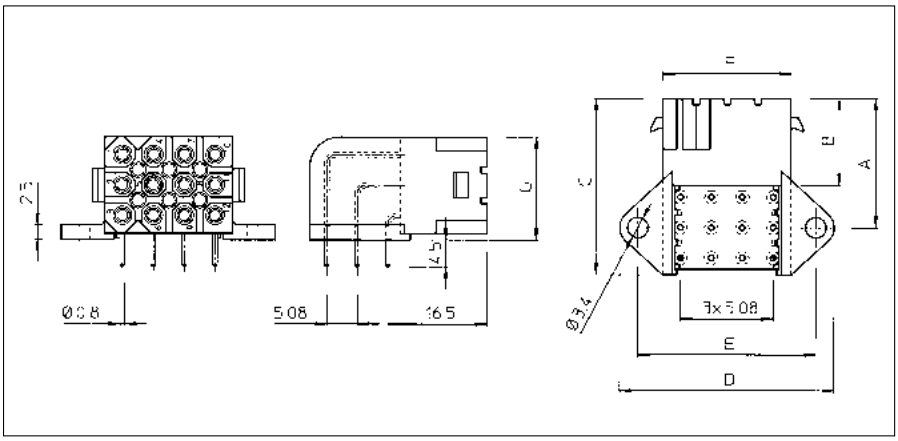




Part number Solid machined contacts	Part number Stamped and formed contacts	Number of contact pos.	Number of discrimination pos.	A	B	C	D	E
SMS2GE4	SMS2SE4K9	2	0	11.1	-	19.1	13.4	5.9
SMS3GE4	SMS3SE4K9	3	0	16.2	14.0	10.2		
SMS4GE4	SMS4SE4K9	4	0	21.3		15.2		
SMS6GE4	SMS6SE4K9	6	0	16.2	19.2	10.2		10.9
SMS9GE4	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		
SMS36GE4	SMS36SE4K9	36	0	46.5	15.2	54.6		20.9

For other platings: see plating table

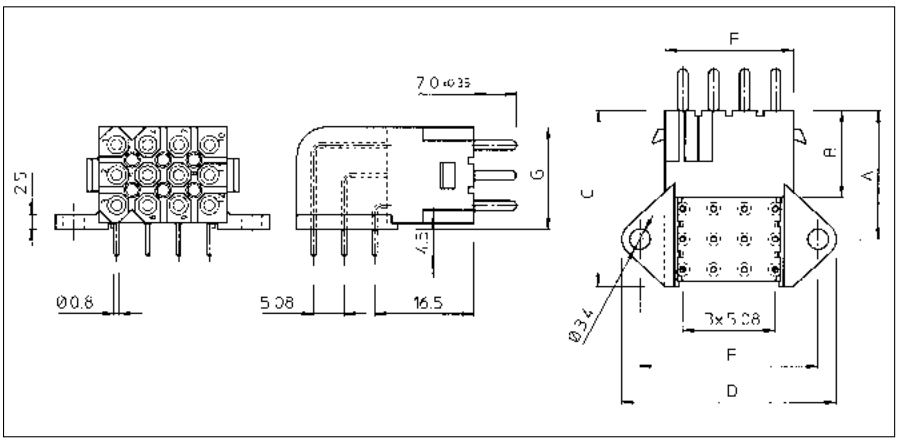
Right angle boardmount with female contacts (SMS--GE5 / SMS--SE5K9)



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	29.2	21.2	17.2
SMS18GE5	SMS18SE5K9	18	10				45.4	39.4	31.2	

For other platings: see plating table

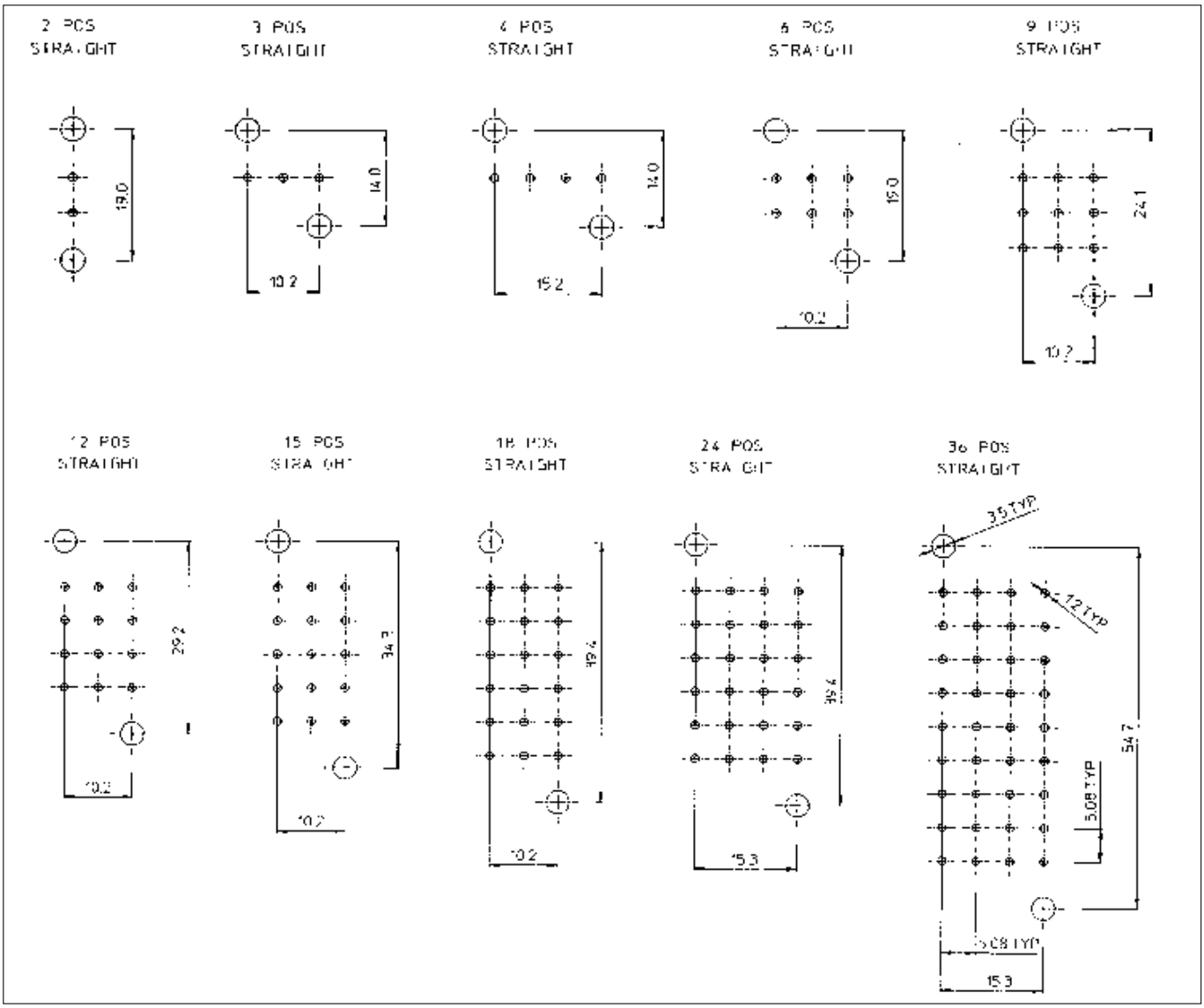
Right angle boardmount with male contacts (SMS--GE6 / SMS--SE6K9)



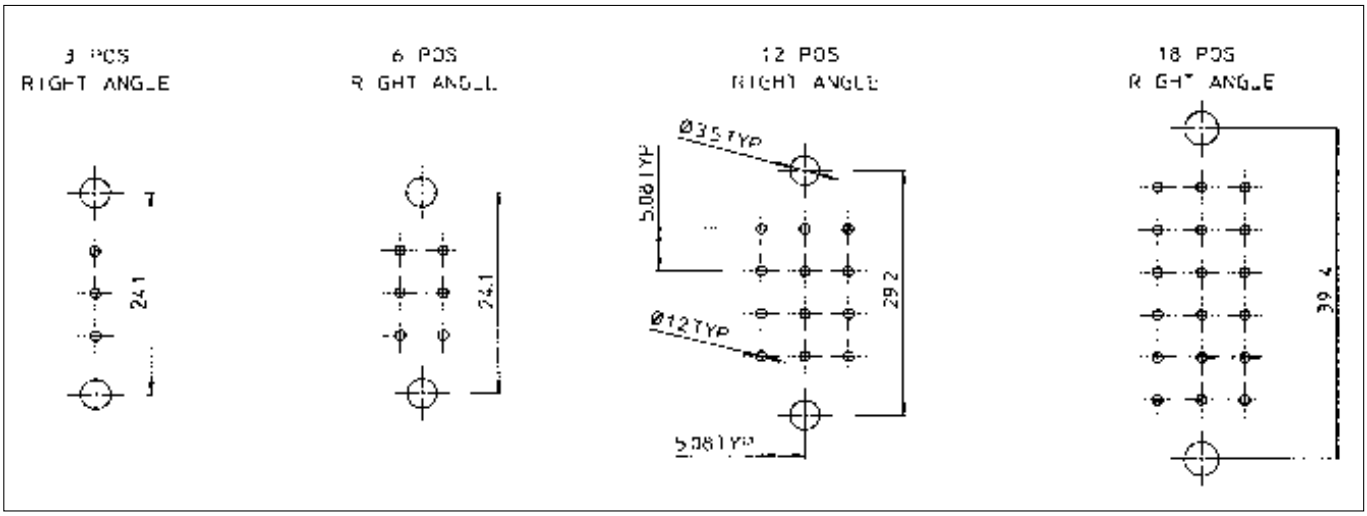
Part number Solid machined contacts	Part number Stamped and formed contacts	Number of contact pos.	Number of discrimination pos.	A	B	C	D	E	F	G
SMS3GE6	SMS3SE6K9	3	0	16.5	14.4	20.5	30.2	24.2	16.2	6.8
SMS6GE6	SMS6SE6K9	6	0	19.0		24.5				11.9
SMS12GE6	SMS12SE6K9	12	6	21.6		29.5	35.2	29.2	21.2	17.2
SMS18GE6	SMS18SE6K9	18	10				45.4	39.4	31.2	

For other platings: see plating table

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



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 positieve 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.

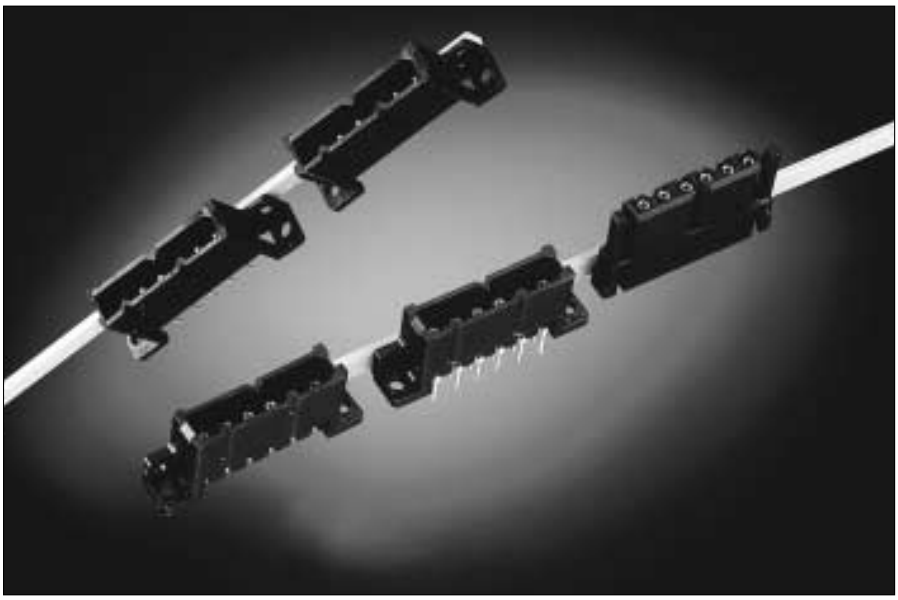
Features and benefits

- 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 seperately.

Plating table

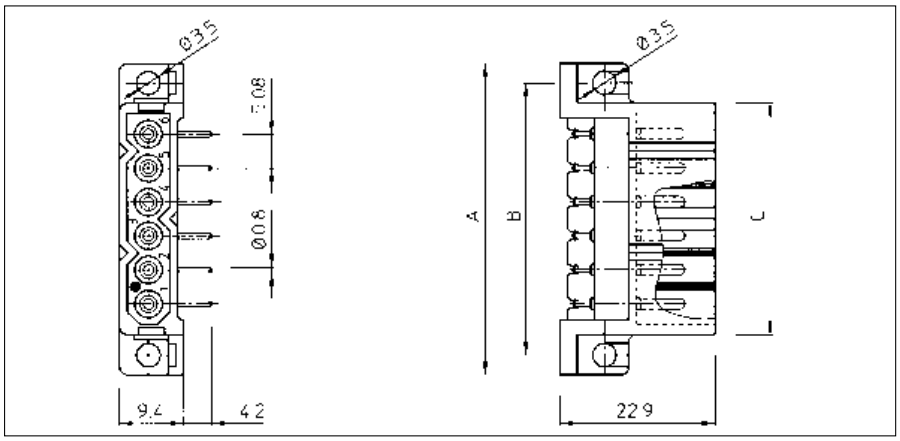
Plating for solid machined contacts:
No digit (std) = Min. 0.4µ Gold all over, over Nickel.
T = 3 - 5µ Tin all over
Plating for Stamped and formed contacts :
D28 = Min. 0.75µ Au over nickel.
D70 = Gold flash all over
TR29 = 1.2µ Pre-plated Tin all over.
Plating for coax contacts:
Z17 = Min. 0.75µ Au 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 - Qikmate Pin Header

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

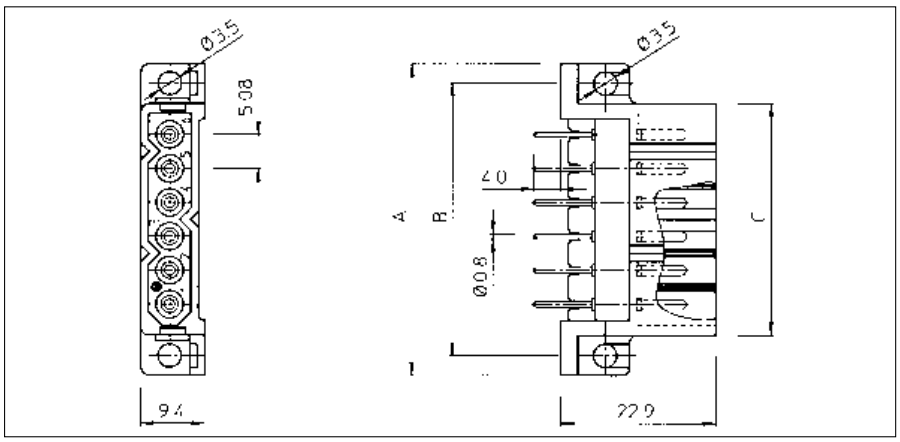


Part number Stamped and formed contacts	Part number Solid machined contacts	Number of contact positions	A	B	C
SMS3PH3TR29	**SMS3PHGE6**	**3**	31.2	25.4	19.3
SMS4PH3TR29	**SMS4PHGE6**	**4**	36.3	30.4	24.4
SMS6PH3TR29	**SMS6PHGE6**	**6**	46.5	40.6	34.5
SMS9PH3TR29	**SMS9PHGE6**	**9**	61.7	55.9	49.8
SMS10PH3TR29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

For other platings: see plating table.

Other solder tail lenghts on request

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

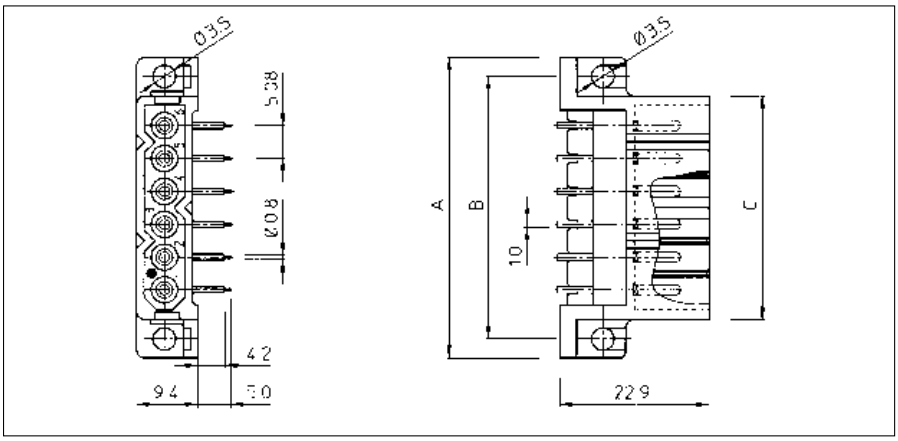


Part number Stamped and formed contacts	Part number Solid machined contacts	Number of contact positions	A	B	C
SMS3PH4TR29	**SMS3PHGE4**	**3**	31.2	25.4	19.3
SMS4PH4TR29	**SMS4PHGE4**	**4**	36.3	30.4	24.4
SMS6PH4TR29	**SMS6PHGE4**	**6**	46.5	40.6	34.5
SMS9PH4TR29	**SMS9PHGE4**	**9**	61.7	55.9	49.8
SMS10PH4TR29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

For other platings: see plating table.

Other solder tail lenghts on request

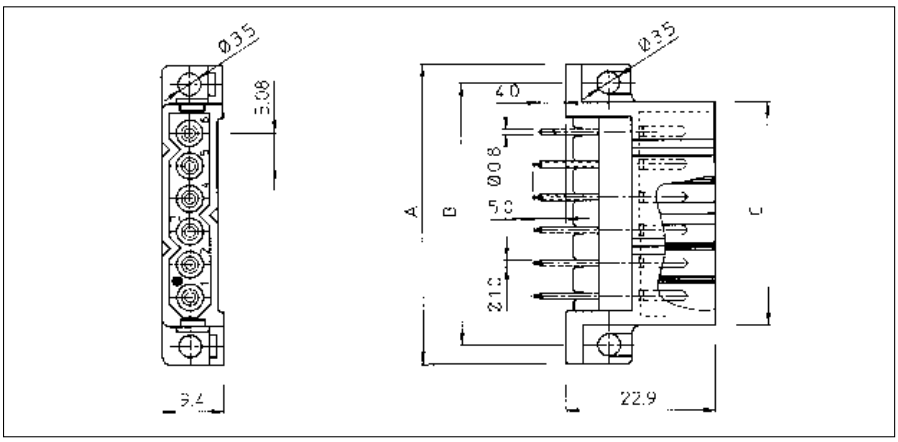
Right angle coax header boardmount with male contacts (SMS--CH1Z17)



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.

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

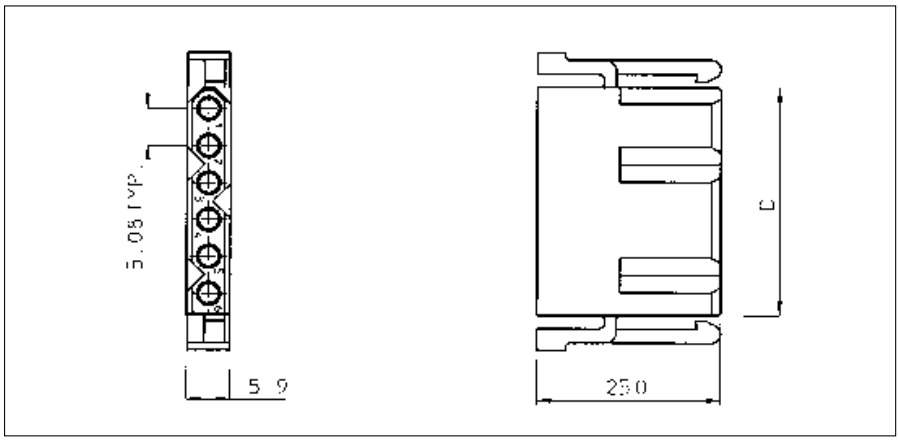


Part number positions	Number of contact	A	B	C
SMS3CH2Z17	3	31.2	25.4	19.3
SMS4CH2Z17	4	36.3	30.4	24.4
SMS6CH2Z17	6	46.5	40.6	34.5
SMS9CH2Z17	9	61.7	55.9	49.8
SMS10CH2Z17	10	66.8	61.0	54.9

For plating spec.: see plating table.

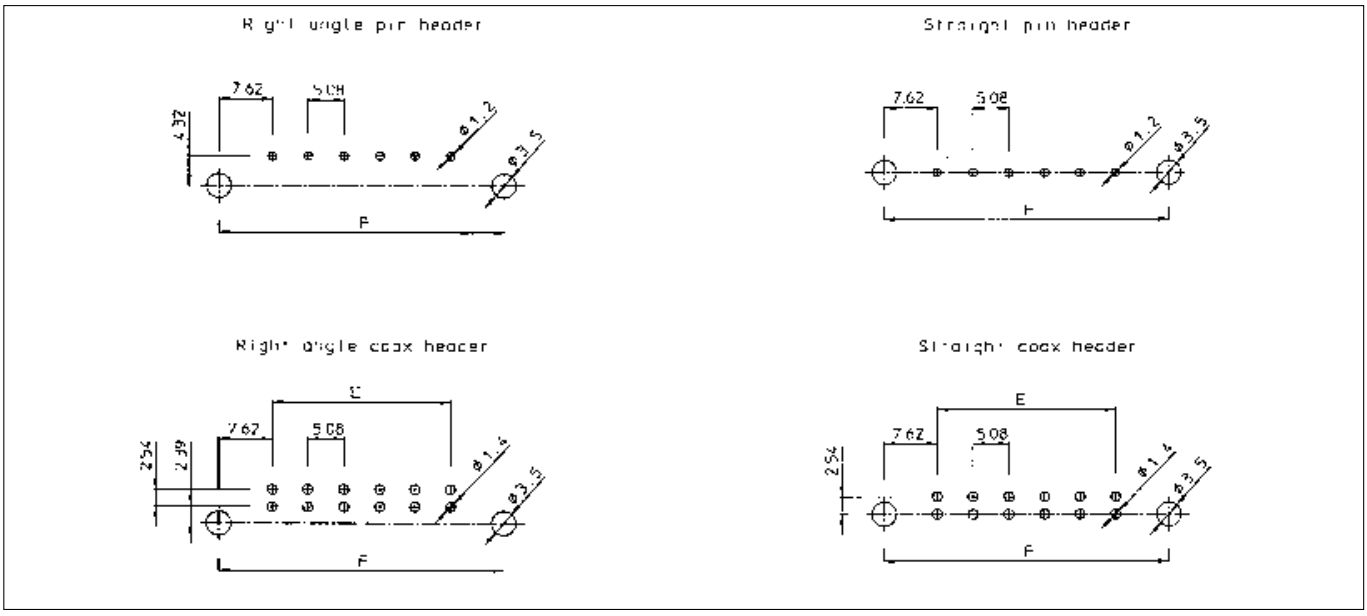
SMS - Qikmate Pin Header

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

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