

High performance hyfen rectangular cable connectors

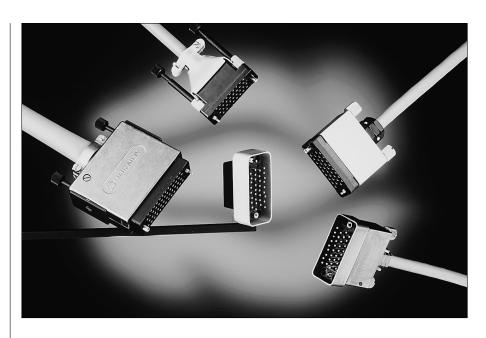
Description

MSM rectangular connectors offers an extremely reliable, rugged, and versatile connection system .

They are a range of multiway connectors available in 9 sizes from 9 to 75 positions. MS-M cable connectors can be offered with a full range of hardware and accessories. Guiding pins and sockets, turnable jackscrews, a variety of cable hoods, pin protection shrouds and discrimination pins make this connector range a truly versatile system.



- Connectors supplied pre-assembled except for panel mount versions.
- Available in 14-20-26-34-42-50-75 and 104 positions.
- 34 contact positions suitable for V.35 applications (see V.35 section)
- Full range of accessories available including hoods, strain relief clamps, guide pins, jackscrews and pin protection shrouds.
- MS-M hyfen complies with NFC 93426
 HE 621-622 and MIL-C-28748 specifications.
- UL recognized File Nr.: E238675



Performance characteristics

| Operating | |
|-----------------|----------------------|
| temperature: | -55°C to +125°C |
| Insulation | |
| resistance: | 5000 M Ω min. |
| Test potential: | 2000 VAC |
| Durability: | 500 matings and |
| - | unmatings. |
| Vibration | Per MIL-STD 202 |
| resistance | method 204 |
| Shock: | Per MIL-C-STD 202 |
| | method 207 |
| | |

Construction

Connector Material : Glass filled Phenolic
Flammability rating : UL94-V0
Hoods: Aluminium alloy
gold chromate or anodized
Polyamide 6.6 - black - UL94-V2
Cable clamps: Stainless steel
Polarizing hardware: Brass nickel plated
Shrouds: Aluminium alloy
gold chromate or anodized

Contact accommodation

- "MS-M" Hyfen connectors accept TRIM TRIO size 16 removable snap-lock contacts (see contact section)
- Contacts to be ordered seperately.

How to order

| Connector family | | | 34 34 | P P | M M | 124 120 | S S- | GE | 16 |
|------------------------------|--|--|----------|--------|--------|------------|---------|--------|--------|
| Contact arrangem | ent | | | | | | | | |
| Type of housing: | P: plug body for male contacts R: Receptacle housing for female contacts | | | | | | | | |
| N° 16 contact | | | | | | | | | |
| Design variation | | | | | | | | | |
| Pin protection shi | oud | | | | | | | | |
| GE = plastic turnable | | | | | | | | | |
| Code for special v | ariations | | | | | | | | |

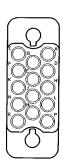


Contact arrangement

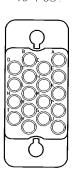
9 POS.



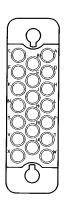
14 POS.



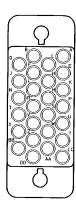
18 POS



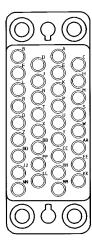
20 POS.



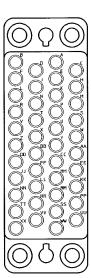
26 POS.



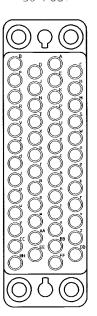
34 POS



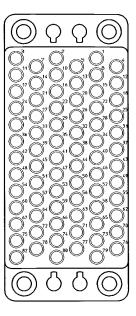
42 POS



50 POS



75 POS



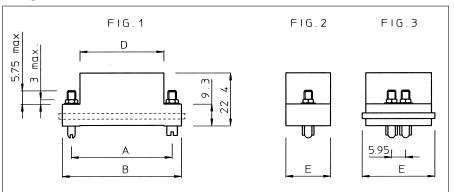
The contact position identification letters or numbers shown in the above diagrams apply to MS-M plug and receptacle connectors. Dimensionally, corresponding types of plug and receptacle mouldings are the same and differ only in that the contact position lettering/numbering of the plug (MS-PM) is a mirror image of that of the receptacle (MS-RM). Note that pins and/or sockets can be used in either the plug or receptacle moulding.

Note: Contact identification is shown for wiring face of the receptacle and mating face at plug connector.



Panel mount connectors with guiding hardware (MS--M1GE00)



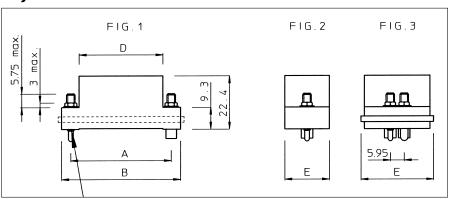


| Commonton | Pa | rt number | | | | | |
|-----------|--------------------------------|--|-------|-------|-------|-------|------|
| Connector | Plug version for male contacts | Receptacle version for female contacts | A | В | D | E | Fig. |
| 9 | MS9PM1GE00 | MS9RM1GE00 | 25.4 | 33.3 | 20.5 | 9.5 | |
| 14 | MS14PM1(*)GE00 | MS14RM1(*)GE00 | 23.8 | 31.8 | 20.1 | 11.7 | |
| 18 | MS18PM1 GE00 | MS18RM1 GE00 | 25.4 | 33.3 | 20.5 | 14.2 | |
| 20 | MS20PM1(*)GE00 | MS20RM1(*)GE00 | 31.75 | 39.65 | 27.95 | 11.7 | 1-2 |
| 26 | MS26PM1(*)GE00 | MS26RM1(*)GE00 | 33.3 | 41.3 | 27.2 | 15.0 | 1-2 |
| 34 | MS34PM1(*)GE00 | MS34RM1(*)GE00 | 42.8 | 50.8 | 35.7 | 19.05 | |
| 42 | MS42PM1(*)GE00 | MS42RM1(*)GE00 | 50.55 | 58.65 | 42.95 | | |
| 50 | MS50PM1(*)GE00 | MS50RM1(*)GE00 | 57.95 | 65.85 | 50.85 | 18.95 | |
| 75 | MS75PM1(*)GE00 | MS75RM1(*)GE00 | | | | 28.1 | 1-3 |

 $^{(\}mbox{\ensuremath{^{\star}}})$ Complete part number with "S" for connector with protective shroud.

Panel mount connectors with fixed jackscrew hardware (MS--M58GE00)





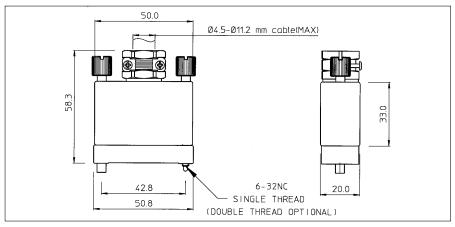
| Commenter | Part | number | | | | | |
|----------------|--------------------------------|--|-------|-------|-------|-------|------|
| Connector size | Plug version for male contacts | Receptacle version for female contacts | A | В | D | E | Fig. |
| 9 | MS9PM58GE00 | MS9RM58GE00 | 25.4 | 33.3 | 20.5 | 9.5 | |
| 14 | MS14PM58(*)GE00 | MS14RM58(*)GE00 | 23.8 | 31.8 | 20.1 | 11.7 | |
| 18 | MS18PM58GE00 | MS18RM58GE00 | 25.4 | 33.3 | 20.5 | 14.2 | |
| 20 | MS20PM58(*)GE00 | MS20RM58(*)GE00 | 31.75 | 39.65 | 27.95 | 11.7 | 1-2 |
| 26 | MS26PM58(*)GE00 | MS26RM58(*)GE00 | 33.3 | 41.3 | 27.2 | 15.0 | 1-2 |
| 34 | MS34PM58(*)GE00 | MS34RM58(*)GE00 | 42.8 | 50.8 | 35.7 | 19.05 | |
| 42 | MS42PM58(*)GE00 | MS42RM58(*)GE00 | 50.55 | 58.65 | 42.95 | | |
| 50 | MS50PM58(*)GE00 | MS50RM58(*)GE00 | 57.95 | 65.85 | 50.85 | 18.95 | |
| 75 | MS75PM58(*)GE00 | MS75RM58(*)GE00 | | | | 28.1 | 1-3 |

^(*) Complete part number with "S" for connector with protective shroud.



MS34 Cable connector with 1 piece metal suitcase hood (MS34--MEHM)



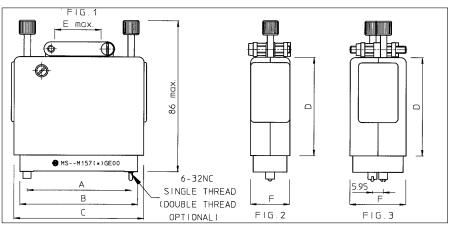


| Part n | umber | |
|-----------------------------------|--|---|
| Plug version for male contacts | Receptacle version for female contacts | Description |
| MS34PMEHM | MS34RMEHM | Anodised hood, plastic strain relief and turnable hardware. |
| MS34PMSEHM | MS34RMSEHM | Shielded version with nickel plated hood, metal strain relief and turnable hardware |
| MS34PMEHMMET1 | MS34RMEHMMET1 | Version with spring loaded jackscrews |

^(*) Complete part number with "S" for connector with protective shroud.

Cable connector with Alu die cast hood (MS-M157GE00)



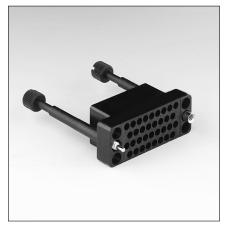


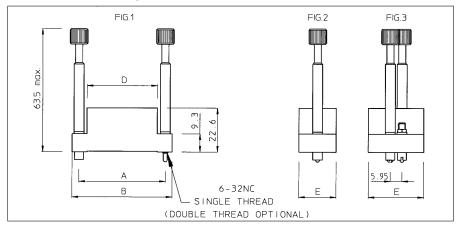
| | Part number | | | | | | E | | |
|----------------|-----------------------------------|--|-------|-------|------|------|------|------|------|
| Connector size | Plug version for male contacts | Receptacle version for female contacts | A | В | С | D | max. | F | Fig. |
| 50 | MS50PM157GE00 | MS50RM157GE00 | 57.95 | 65.85 | 73.0 | 56.0 | 20.0 | 22.2 | 1-2 |
| 75 | MS75PM157GE00 | MS75RM157GE00 | 57.95 | 65.85 | 73.0 | 56.0 | 25.0 | 31.2 | 1-3 |

^(*) Complete part number with "S" for connector with protective shroud.



Cable connector without strain relief and turnable jackscrew hardware (MS-M007GE00)



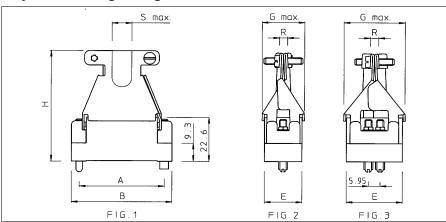


| Connector size | Plug version for male contacts | Receptacle version for female contacts | A | В | D | E | Fig. |
|----------------|--------------------------------|--|-------|-------|-------|-------|------|
| 9 | MS9PM007GE00 | MS9RM007GE00 | 25.4 | 33.3 | 20.5 | 9.5 | |
| 14 | MS14PM007(*)GE00 | MS14RM007(*)GE00 | 23.8 | 31.8 | 20.1 | 11.7 | |
| 18 | MS18PM007GE00 | MS18RM007GE00 | 25.4 | 33.3 | 20.5 | 14.2 | |
| 20 | MS20PM007(*)GE00 | MS20RM007(*)GE00 | 31.75 | 39.65 | 27.95 | 11.7 | 1.2 |
| 26 | MS26PM007(*)GE00 | MS26RM007(*)GE00 | 33.3 | 41.3 | 27.2 | 15.0 | 1-2 |
| 34 | MS34PM007(*)GE00 | MS34RM007(*)GE00 | 42.8 | 50.8 | 35.7 | 19.05 | |
| 42 | MS42PM007(*)GE00 | MS42RM007(*)GE00 | 50.55 | 58.65 | 42.95 | | |
| 50 | MS50PM007(*)GE00 | MS50RM007(*)GE00 | 57.95 | 65.85 | 50.85 | 18.95 | |
| 75 | MS75PM007(*)GE00 | MS75RM007(*)GE00 | | | | 28.1 | 1-3 |

^(*) Complete part number with "S" for connector with protective shroud.

Cable connector with metal butterfly hood and guiding hardware (MS--M120GE00)





| Connector size | Part number | | | | | G | | | | |
|----------------|-----------------------------------|--|------|------|-------|------|------|------|-----------|------|
| | Plug version for male contacts | Receptacle version for female contacts | A | В | E | max. | Н | max. | R max. | Fig. |
| 34 | MS34PM120(*)GE00 | MS34RM120(*)GE00 | 42.8 | 50.8 | 19.05 | 22.2 | 56.7 | 10 | 13 | 1-2 |

 $^{(\}mbox{\ensuremath{^{\star}}})$ Complete part number with "S" for connector with protective shroud.



Rectangular boardmount connectors to mate with MSM cable connectors

Description

The MSO series, derived from the MSM series, is for straight or right-angled application on a printed circuit board. Pre-assembled MSO connectors with pin or socket N(16 contacts are intermateable with the existing MSM rectangular cable connectors.

The N° 16 TRIM TRIO .0625" (1.6mm) diameter contacts are available in either solid machined or stamped and formed versions.

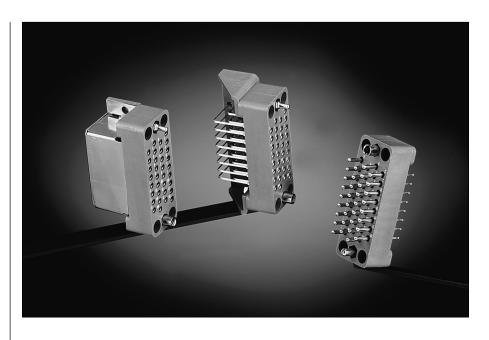
The polarizing hardware can be delivered in either guiding or jackscrew versions.

Features and benefits

- Connectors supplied pre-assembled with dip solder contacts.
- Contacts available in solid machined or stamped and formed version.
- Available in 9-18-34-50-75 positions.
- For right-angled versions, there is a choice of 9-18 and 34 contact positions.
- 34 contact positions suitable for V.35 applications (see section V.35)
- Polarising hardware prevent mismating.
- UL94-V0 rated thermoplast.

Performance characteristics

| Operating | |
|-----------------|----------------------------|
| temperature: | -55°C to +125°C |
| Current rating: | 5 Amp for stamped contacts |
| | 7.5 Amp for machined |
| | contacts |
| Contact | |
| resistance: | \leq 3 m Ω |
| Insulation | |
| resistance: | 5000 M min. |
| Test potential: | 2000 VAC |
| Durability: | 500 matings and unmatings. |
| | _ |



Construction

Connector Material : Glass filled polysulfone Flammability rating : UL94-V0
Polarizing hardware: Brass nickel plated
Contacts: High conductive copper alloy

Plating table

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

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

 $T = 3 - 5\mu$ Tin all over

Intermateability

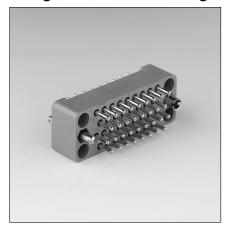
 "MSO" with pre-assembled contacts are intermateable with the "MSM" rectangular cable connectors equipped with TRIM TRIO crimp-type removable snap-lock contacts.

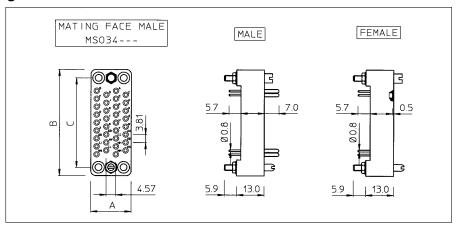
How to order

| Connector family | | | MSO | 34 | M | R | G | 58 | SE1 | К9 |
|---------------------|-------------|--|-----|----|---|---|---|----|-----|----|
| Contact arrangement | | | | | | | | | | |
| N° 16 contacts | | | | | | | | | | |
| Type of housing | P: R: | Plug body with male contacts Receptacle body with female contacts | | | | | | | | |
| Contact termination | K: G: | straight dipsolder Right angle dipsolder | | | | | | | | |
| Type of hardware | 1: 58: | Guide pin and socket Threaded jackscrew pin and socket | | | | | | | | |
| Design variation | E1: SE1: | Solid machined contacts stamped and formed contacts | | | | | | | | |
| Plating indication | | | | | | | | | | |



Straight boardmount with guiding hardware (MSO--M-K1--)





| | | Part number | | | | | | |
|----------------|-------------|-------------------------|-----------------------|----------------|------|------|------|--|
| connector size | | on with ned contacts | Version stamped and f | A | В | С | | |
| | male | female | male | female | | | | |
| 9 | MSO9MPK1E1 | MSO9MRK1E1 | MSO9MPK1SE1K9 | MSO9MRK1SE1K9 | 9.5 | 33.3 | 25.4 | |
| 18 | MSO18MPK1E1 | MSO18MRK1E1 | MSO18MPK1SE1K9 | MSO18MRK1SE1K9 | 15.2 | | | |
| 34 | MSO34MPK1E1 | MSO34MRK1E1 | MSO34MPK1SE1K9 | MSO34MRK1SE1K9 | 19.0 | 50.8 | 42.8 | |
| 50 | MSO50MPK1E1 | MSO50MRK1E1 | MSO50MPK1SE1K9 | MSO50MRK1SE1K9 | 18.9 | 65.8 | 57.9 | |
| 75 | MSO75MPK1E1 | MSO75MRK1E1 | MSO75MPK1SE1K9 | MSO75MRK1SE1K9 | 19.4 | | | |

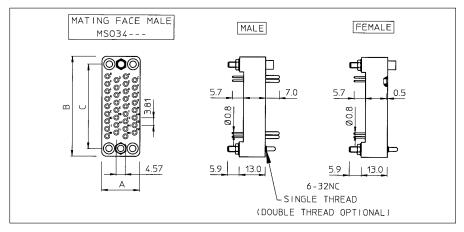
For other platings: See plating table.

Other solder tail lengths on request

Selective loading on request

Straight boardmount with jackscrew hardware (MSO--M-K58--)





| | | Part number | | | | | | |
|----------------|--------------|-------------------------|-----------------|---------------------------|------|------|------|--|
| connector size | | on with ned contacts | | on with ormed contacts | A | В | С | |
| | male | female | male | female | | | | |
| 9 | MSO9MPK58E1 | MSO9MRK58E1 | MSO9MPK58SE1K9 | MSO9MRK58SE1K9 | 9.5 | 33.3 | 25.4 | |
| 18 | MSO18MPK58E1 | MSO18MRK58E1 | MSO18MPK58SE1K9 | MSO18MRK58SE1K9 | 15.2 | | | |
| 34 | MSO34MPK58E1 | MSO34MRK58E1 | MSO34MPK58SE1K9 | MSO34MRK58SE1K9 | 19.0 | 50.8 | 42.8 | |
| 50 | MSO50MPK58E1 | MSO50MRK58E1 | MSO50MPK58SE1K9 | MSO50MRK58SE1K9 | 18.9 | 65.8 | 57.9 | |
| 75 | MSO75MPK58E1 | MSO75MRK58E1 | MSO75MPK58SE1K9 | MSO75MRK58SE1K9 | 19.4 | | | |

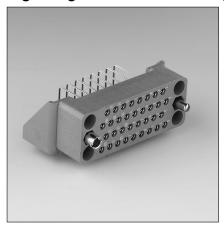
For other platings: See plating table.

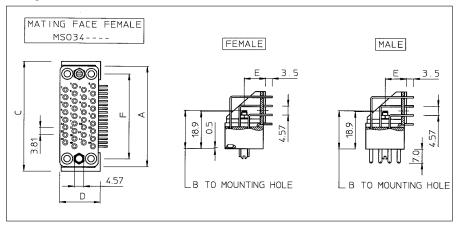
Other solder tail lengths on request

Selective loading on request



Right angle boardmount with guiding hardware (MSO--M-G1--)





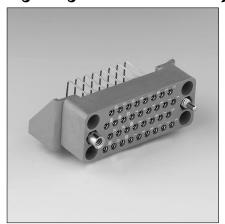
| | Part number | | | | | | | | | |
|----------------|-------------|-------------------------|--|----------------|------|------|------|------|------|------|
| connector size | 101010 | on with ned contacts | Version with stamped and formed contacts | | | В | С | D | E | F |
| | male | female | male | female | | | | | | |
| 9 | MSO9MPG1E1 | MSO9MRG1E1 | | | 33.3 | 23.0 | 38.0 | 16.0 | 10.0 | 25.4 |
| 18 | MSO18MPG1E1 | MSO18MRG1E1 | | | | | | 18.0 | | |
| 34 | MSO34MPG1E1 | MSO34MRG1E1 | MSO34MPG1SE1K9 | MSO34MRG1SE1K9 | 50.8 | 19.3 | 55.5 | 20.5 | 10.5 | 42.8 |

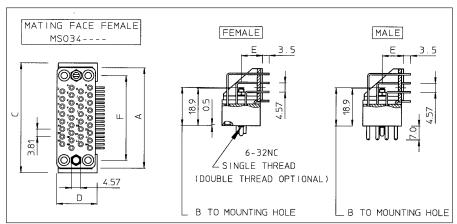
For other platings: See plating table.

Other solder tail lengths on request

Selective loading on request

Right angle boardmount with jackscrew hardware (MSO--M-G58--)





| | Part number | | | | | | | | | |
|----------------|--------------|-------------------------|-------------------------|-----------------|------|------|------|------|------|------|
| connector size | | on with ned contacts | Version stamped and for | A | В | С | D | E | F | |
| | male | female | male | female | | | | | | |
| 9 | MSO9MPG58E1 | MSO9MRG58E1 | | | 33.3 | 23.0 | 38.0 | 16.0 | 10.0 | 25.4 |
| 18 | MSO18MPG58E1 | MSO18MRG58E1 | | | | | | 18.0 | | |
| 34 | MSO34MPG58E1 | MSO34MRG58E1 | MSO34MPG58SE1K9 | MSO34MRG58SE1K9 | 50.8 | 19.3 | 55.5 | 20.5 | 10.5 | 42.8 |

For other platings: See plating table.

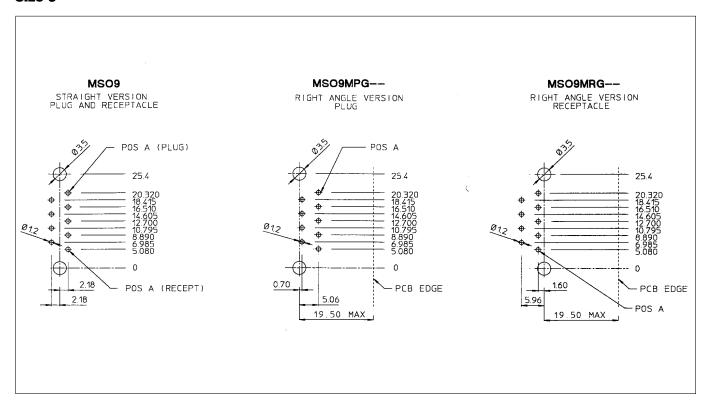
Other solder tail lengths on request

Selective loading on request

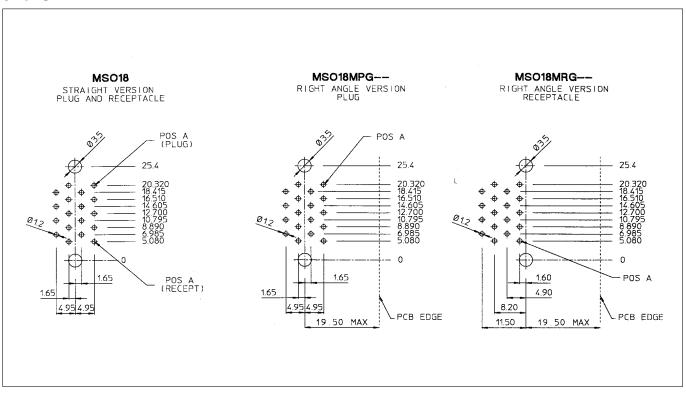


MSO recommended drilling hole pattern

Size 9



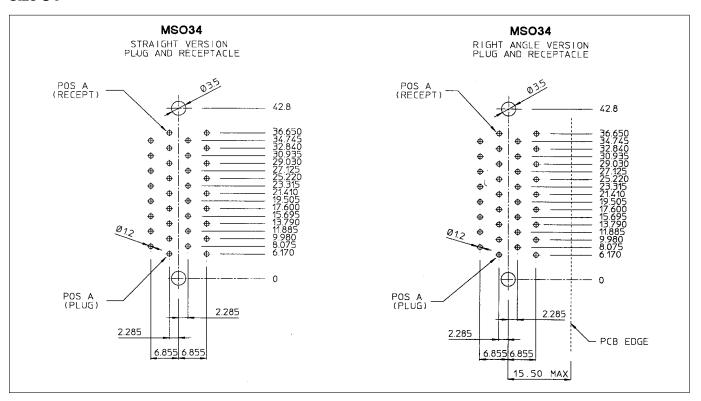
Size 18



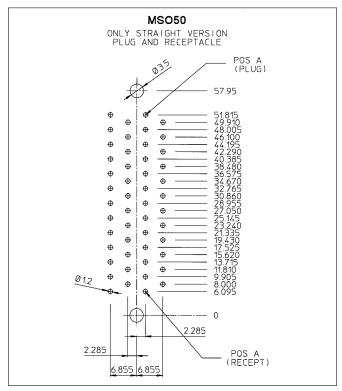


MSO recommended drilling hole pattern

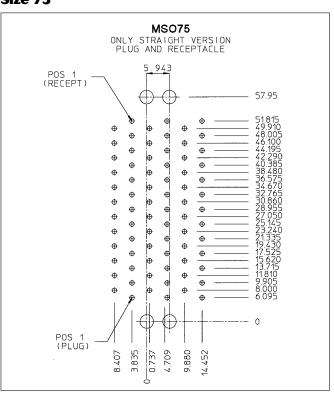
Size 34



Size 50



Size 75



Mouser Electronics

Authorized Distributor

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Souriau:

 MS14PM1GE00
 MS42PM007GE00
 MS50PM007GE00
 MS50PM007SGE00
 MS50PM157GE00

 MS50PM157SGE00
 MS50PM157SGE251
 MS75PM007SGE00
 MS18PM57GE00
 MS20PM118k
 MS20PM1GE00

 MS26PM1GE50B
 MS26PM58GE00
 MS75PM007GE00
 MS75PM1SGE00
 MS75PM57GE00
 MS75PM58GE00

 MS9PM58GE00
 MS14PB6PM
 MS18PM1GE00
 MS50PM1GE00
 MS50PM58GE00
 MS50PM58SGE00

 MS50PMBR207T
 MS50PMBR407T
 MS75PM1GE00