

# V.35 DTE/DCE Interface connectors

The Telecommunications Standardization Sector TSS V.35, formerly CCITT V.35

#### **Description**

is the international standard termed "Data Transmission at 48 Kbps using 60-108 Khz Group-Band Circuits. It makes use of a 34 contact connection system specially designed to be used for DTE/ DCE that interface to high speed digital carriers found in computer, modem and telecommunication industries. Being part of the TRIM TRIO wide range of high reliable rectangular connectors, MSO34 (boardmount connectors) and MS34 (cable connectors) are in complete compliance to this specification. To meet this specification, insulators have been manufactured with 34 contact positions which can be loaded with the international accepted N° 16 TRIM TRIO .0625" (1.6mm) diameter contacts The boardmount connectors (MSO34) are available in straight and right angle versions

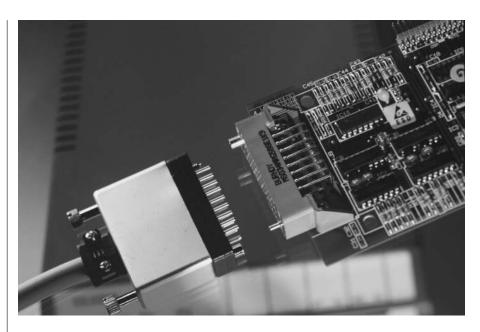
contacts. The cable connectors **(MS34)** can be offered with a full range of hardware and accessories. Guiding pins and sockets, turnable jackscrew system, different cable hoods with strain relief, pin protection shrouds and discrimination pins make this connector range as complete as possible.

equipped with either solid machined

or stamped and formed male / female

#### **Features and benefits**

- Complete compliance with International Standards of ISO 2593 for TTS V.35 (formerly CCITT V.35) interfacing.
- In compliance with NFC 93426 HE621-622 and MIL-C-28748 specifications.
- UL recognised.
- UL94-VO rated thermoplastic
- Boardmount connectors supplied preassembled with dipsolder contacts in
- either: Male or female contacts.
  - Machined or stamped and formed contacts
  - Straight or right angle
- Stamped and formed contacts have selective tin plating on solder tails, thus eliminating extra flux operations.
- Selective loading possible on request.
- Right angle version equipped with true position location wafer.
- · Hold-down feature available



#### **Intermateability**

All the references mentioned are perfectly intermateable, provided that 1 mated pair exists out of a plug half and a receptacle half.

Mated pairs can be made for following applications:

- Cable to cable
- Cable to panel
- Cable to straight or right-angled boardmount

Technical data on MSO34 PC-Boardmount connectors

#### **Performance characteristics**

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

#### **Plating table**

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

over, over Nickel.

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

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

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

#### Construction

Material: Glass-reinforced thermoplastic Flammability rating: UL94-V0 Polarising hardware: Brass nickel plated Contacts: High conductive copper alloy Technical data on MS34 Cable connectors

#### Darformance characteristics

e cnaracteristics
-55°C to +125°C
5000 M $\Omega$ min.
2000 VAC
500 matings and
unmatings.
Per MIL-STD 202
method 204
Per MIL-STD 202
method 207

#### **Contact accommodation**

- "MS" Cable connectors accept TRIM TRIO size 16 removable snap-lock contacts (see contact section)
- Contacts to be ordered separately

#### Construction

Connector body: Glass-reinforced Phenolic Flammability rating: UL94-V0 Cable hoods: Aluminium alloy or Polyamide 6.6 Cable clamps: Stainless steel

Protection Shrouds: Aluminium alloy

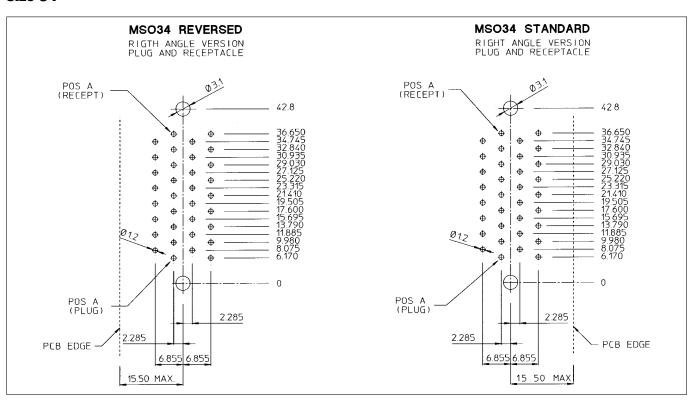


#### **How to order**

Connector family		MSO	34	M	R	G	58	SE1	К9
Contact arrangement	t .								
N° 16 contacts									
Type of housing	P: Plug body with male contacts R: Receptacle body with female contact	ts							
Contact termination	<b>K:</b> straight dipsolder <b>G:</b> Right angle dipsolder <b>H:</b> Reversed version								
Type of hardware	1: Guide pin and socket 58: Threaded jackscrew pin and socket	:							
Design variation	E1: Solid machined contacts SE1: Stamped and formed contacts SL1: Metal bracket SEH1: Hold down rivets								
Plating indication									

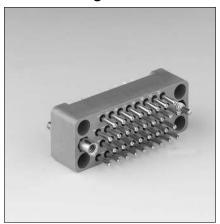
## MS034 recommended drilling hole pattern

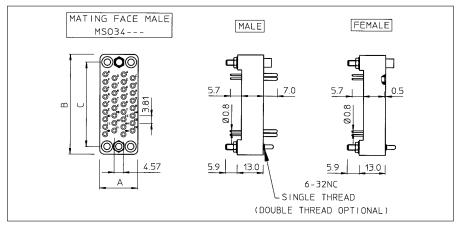
#### **Size 34**





#### **MSO34 Straight boardmount connectors**





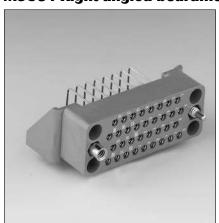
Part number			
Version with solid machined contacts	Version with stamped and formed contacts	Description	
MSO34MPK1E1	MSO34MPK1SE1K9	Guide pin, guide socket and male contacts	
MSO34MRK1E1	MSO34MRK1SE1K9	Guide pin, guide socket and female contacts	
MSO34MPK58E1	MSO34MPK58SE1K9	Jackscrew pin, jackscrew socket and male contacts	
MSO34MRK58E1	MSO34MRK58SE1K9	Jackscrew pin, jackscrew socket and female contacts	

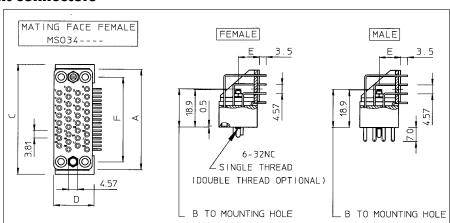
For other platings: See plating table

Other solder tail lengths on request

Selective loading on request

# **MSO34 Right-angled boardmount connectors**





Part number		
Version with solid machined contacts	Version with stamped and formed contacts	Description
MSO34MPG1E(*)1	MSO34MPG1SE(*)1K9	Guide pin, guide socket and male contacts
MSO34MRG1E(*)1	MSO34MRG1SE(*)1K9	Guide pin, guide socket and female contacts
MSO34MPG58E(*)1	MSO34MPG58SE(*)1K9	Jackscrew pin, jackscrew socket and male contacts
MSO34MRG58E(*)1	MSO34MRG58SE(*)1K9	Jackscrew pin, jackscrew socket and female contacts

For other platings: See plating table

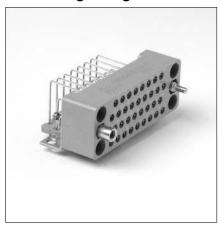
Other solder tail lengths on request

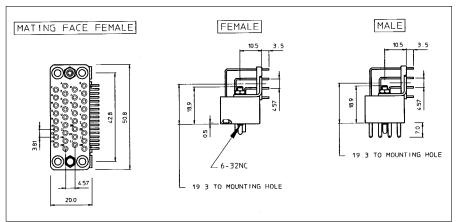
Selective loading on request

(\*) Complete part number with "H" for connector with hold down rivets



## MSO34 Right-angled boardmount connectors - Standard version with metal brackets





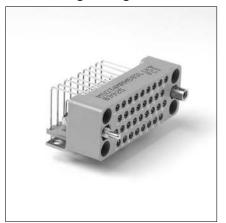
Part number Version with stamped and formed contacts	Description
MSO34MPG1SL1K9	Guide pin, guide socket and male contacts
MSO34MRG1SL1K9	Guide pin, guide socket and female contacts
MSO34MPG58SL1K9	Jackscrew pin, jackscrew socket and male contacts
MSO34MRG58SL1K9	Jackscrew pin, jackscrew socket and female contacts

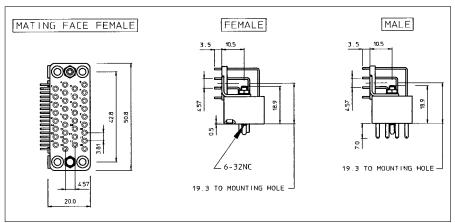
For other platings: See plating table

Other solder tail lengths on request

Selective loading on request

## MSO34 Right-angled boardmount connectors - Reversed version with metal brackets





Part number Version with stamped and formed contacts	Description	
MSO34MPH1SL1K9	Guide pin, guide socket and male contacts	
MSO34MRH1SL1K9	Guide pin, guide socket and female contacts	
MSO34MPH58SL1K9	Jackscrew pin, jackscrew socket and male contacts	
MSO34MRH58SL1K9	Jackscrew pin, jackscrew socket and female contacts	

For other platings: See plating table

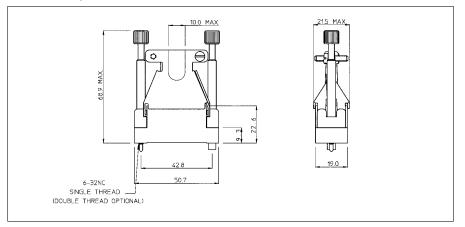
Other solder tail lengths on request

Selective loading on request



### MS34 Cable connectors with metal butterfly hood



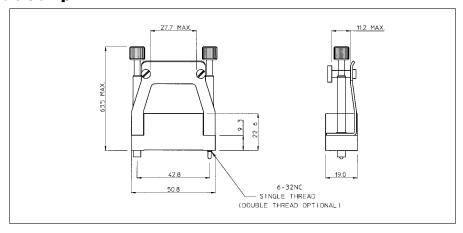


Part number		
Version with male contacts	Version with female contacts	Description
MS34PM120(*)GE00	MS34RM120(*)GE00	Guide pin, guide socket and butterfly hood.
MS34PM140(*)GE00	MS34RM140(*)GE00	Jackscrew pin , jackscrew socket and butterfly hood.
MS34PM124(*)GE00	MS34RM124(*)GE00	Turnable jackscrew pin, turnable jackscrew socket and butterfly hood.
MS34PM1(*)GE00	MS34RM1(*)GE00	Guide pin and guide socket. No strain relief hood
MS34PM58(*)GE00	MS34RM58(*)GE00	Jackscrew pin and jackscrew socket. No strain relief hood.
MS34PM007(*)GE00	MS34RM007(*)GE00	Turnable jackscrew pin and turnable jackscrew socket. No strain relief hood.

<sup>(\*)</sup> Complete catalogue number with "S" for connector with protective shroud.

## MS34 Cable connectors with cable clamp





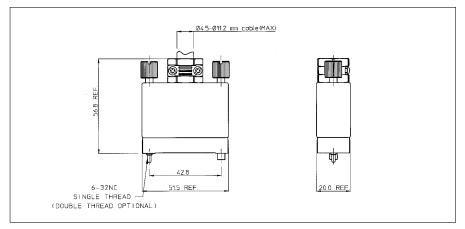
Part n	umber	
Version with male contacts	Version with female contacts	Description
MS34PM117(*)GE00	MS34RM117(*)GE00	Guide pin, guide socket and cable clamp
MS34PM127(*)GE00	MS34RM127(*)GE00	Jackscrew pin, jackscrew socket and cable clamp
MS34PM107(*)GE10	MS34RM107(*)GE10	Turnable jackscrew pin, turnable jackscrew socket and cable clamp.

 $<sup>(\</sup>mbox{\ensuremath{^{\prime\prime}}})$  Complete catalogue number with "S" for connector with protective shroud.



### MS34 Cable connectors with metal suitcase hood



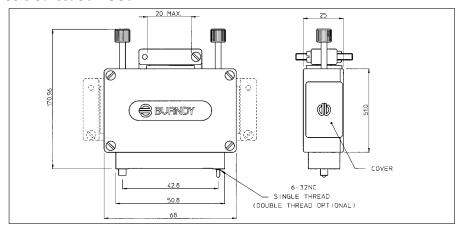


Part n	umber		
Version with male contacts	Version with female contacts	Description	
MS34PMEHM(*)	MS34RMEHM(*)	Anodised hood, plastic strain relief and turnable hardware.	
MS34PMSEHM(*)	MS34RMSEHM(*)	Shielded version with nickel plated hood, metal strain relief and	
		turnable hardware.	
MS34PMEHMMET1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

<sup>(\*)</sup> Complete catalogue number with "S" for connector with protective shroud.

## MS34 Cable connectors with plastic suitcase hood





Part n	umber	
Version with male contacts	Version with female contacts	Description
MS34PMEH2(*)	MS34RMEH2(*)	Guide pin, guide socket and plastic suitcase hood.
MS34PMEH3(*)	MS34RMEH3(*)	Jackscrew pin, jackscrew socket and plastic suitcase hood.
MS34PMEHO(*)	MS34RMEHO(*)	Turnable jackscrew pin, turnable jackscrew socket and plastic suitcase hood.

<sup>(\*)</sup> Complete catalogue number with "S" for connector with protective shroud.