

## INTRODUCTION

Adam Tech MR Series Miniature Ribbon connectors come in a variety of terminations including Solder Terminals, Straight PCB Tails, Right Angle PCB mount, Flat Cable IDC and Straddle Mount Card Edge. These connectors with their high pressure, flat wiping contacts are a very popular widely used interface especially in telecommunication applications. Offered in 14, 24, 36 and 50 positions they are a good choice for high reliability positive latching connector applications. They combine an extremely reliable contact design with the popular, polarized D face. Adam Tech connectors are manufactured with precision stamped contacts and offer a wide selection of mating and mounting options.

## FEATURES:

Available in many termination styles  
High pressure blade contacts  
Industry standard compatibility  
Durable metal shell design  
Variety of Mating and mounting options  
Spring latches provided separately installation optional.

## MATING CONNECTORS:

Adam Tech Miniature Ribbon connectors and all industry standard miniature ribbon connectors.

## SPECIFICATIONS:

### Material:

Standard insulator: PBT, Glass filled, rated UL94V-0  
Optional Hi-Temp insulator: Nylon 6T, rated UL94V-0  
Insulator Color: Blue (Black optional)  
Contacts: Phosphor Bronze  
Shell: Steel, nickel plated

### Contact Plating:

Gold Flash over nickel underplate on mating area, Tin over Copper underplate on tails

### Electrical:

Operating Voltage: 250V AC  
Current Rating: 1 Amp max.  
Contact Resistance: 35 mΩ max.  
Insulation Resistance: 1000 MΩ min.  
Dielectric Withstanding Voltage: 1000V AC for 1 minute

### Mechanical:

Insertion force: 12 oz max.  
Withdrawal force: 4.8 oz min.

### Temperature Rating:

Operating Temperature: -55°C to +105°C  
Soldering process temperature:  
Standard insulator: 235°C  
Hi-Temp insulator: 260°C

### PACKAGING:

Anti-ESD plastic trays

### APPROVALS AND CERTIFICATIONS:

UL Recognized File No. E224053  
CSA Certified File No. LR1578596



# MINIATURE RIBBON

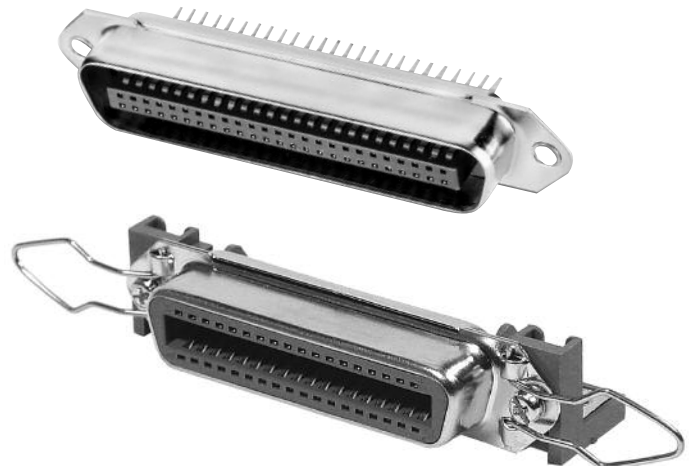
STRAIGHT PCB TAIL

IDC FLAT CABLE

SOLDER TERMINALS

RIGHT ANGLE PCB MOUNT

MR SERIES



## ORDERING INFORMATION



### SHELL SIZE AND POSITIONS

MR14 = 14 Contacts  
MR24 = 24 Contacts  
MR36 = 36 Contacts  
MR50 = 50 Contacts

### MOUNTING

1 = Spring latches with .120" diameter mounting holes (socket only)  
14 = Spring latches with #4-40 clinch nuts in mounting holes (socket only)  
2 = Notch Ears (plug only)  
3 = .120" diameter mounting holes only  
34 = #4-40 threaded clinch nuts in mounting holes w/o spring latches

### CONTACT TYPE

P = Plug  
S = Socket

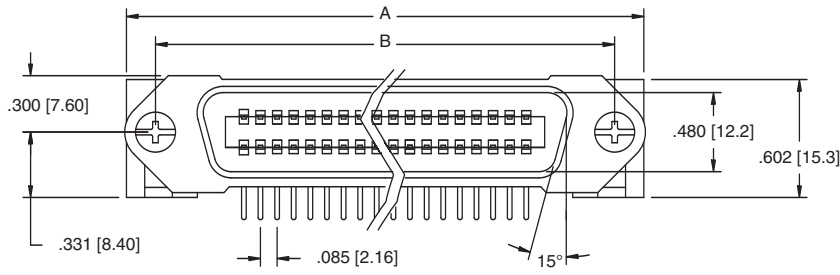
### TERMINATION TYPE

A = Solder Terminals  
C = Straight PCB Tail  
D = Right Angle PCB Mount  
E = IDC, All plastic shell  
F = IDC, Metal Shell  
G = Straddle Mount Tails

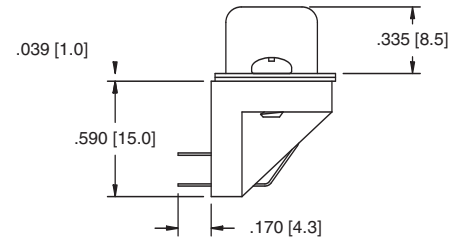
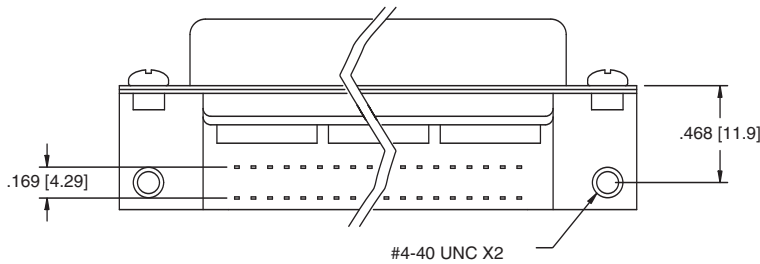
### OPTIONS:

Add designator(s) to end of part number  
30 = 30 μin gold plating in contact area  
BK = Black color insulator  
F = Forked boardlocks  
HT = Hi-Temp insulator for Hi-Temp soldering processes up to 260°C  
LI = Spring Latches Installed

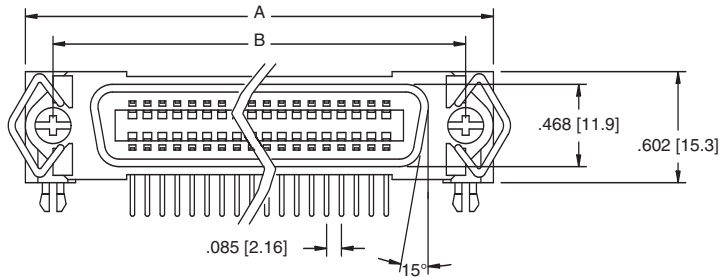
#### RIGHT ANGLE PCB - PLUG



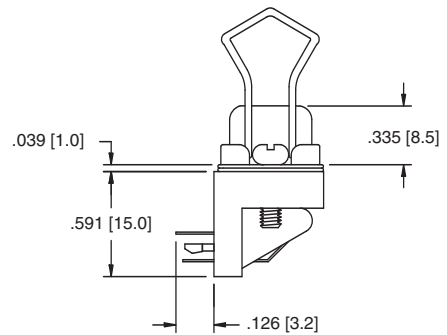
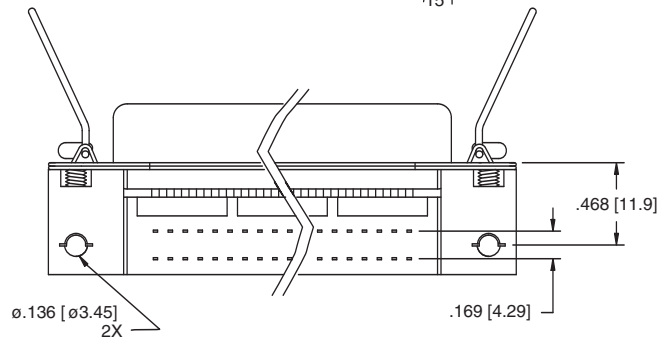
MR36-PD



#### RIGHT ANGLE PCB - SOCKET



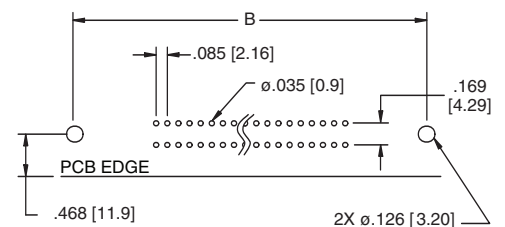
MR36-SD-1-LI



Unit: Inch [mm]

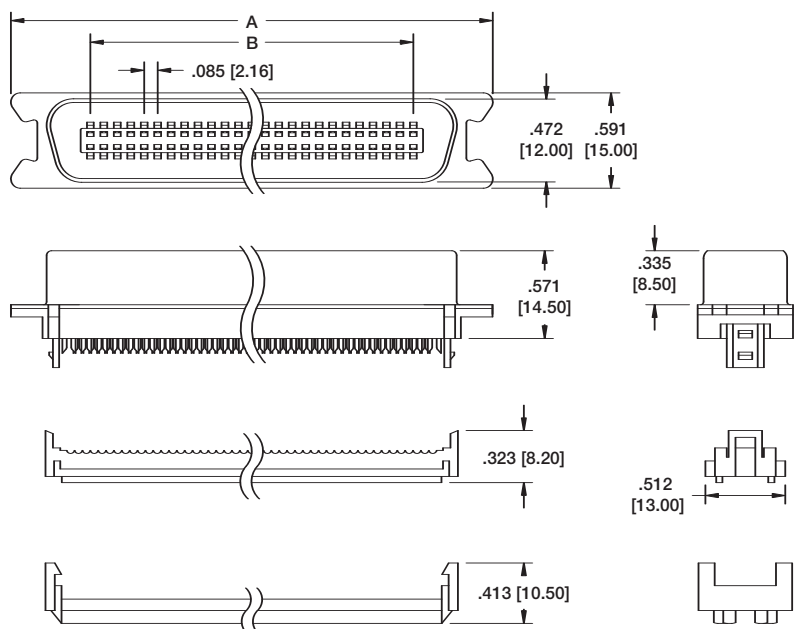
PART NO.	Dimensions	
	A	B
MR14-SD MR14-PD	1.750 [44.45]	1.417 [35.99]
MR24-SD MR24-PD	2.175 [55.25]	1.842 [46.79]
MR36-SD MR36-PD	2.685 [68.20]	2.352 [59.74]
MR50-SD MR50-PD	3.280 [83.31]	2.947 [74.85]

#### Recommended PCB Layout



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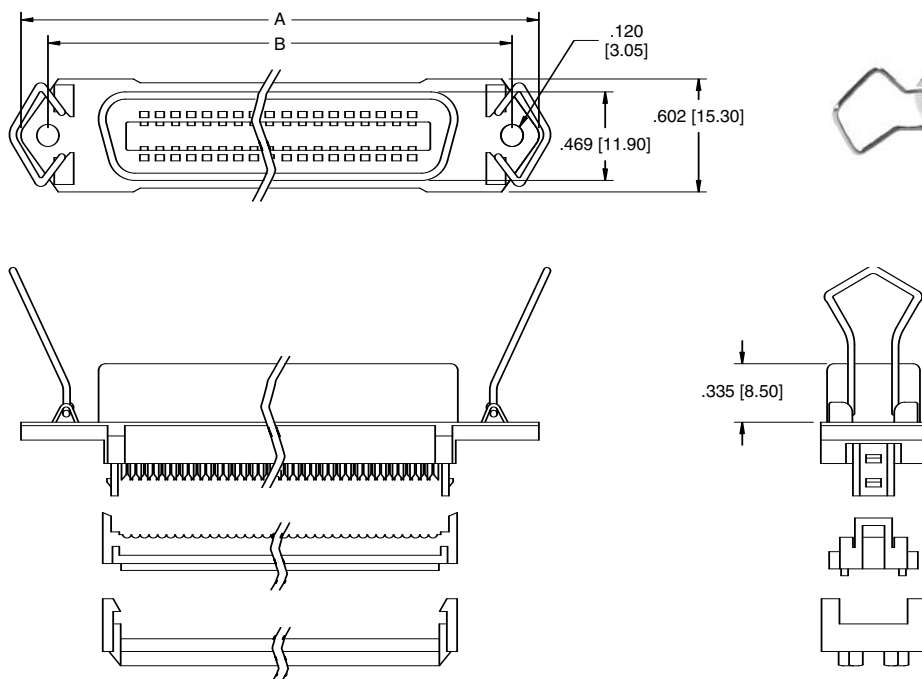
### IDC FLAT CABLE - PLUG



MR36-PF-2

MRXX	NO. OF CONTACTS	DIMENSIONS	
		A	B
MR14	14	1.516 [38.50]	.510 [12.96]
MR24	24	1.941 [49.30]	.935 [23.76]
MR36	36	2.425 [61.60]	1.446 [36.72]
MR50	50	3.020 [76.70]	2.041 [51.84]

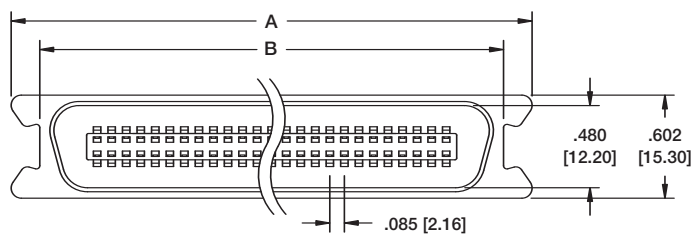
### IDC FLAT CABLE - SOCKET



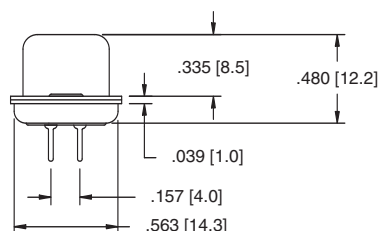
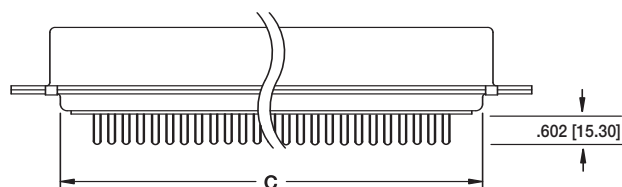
MR36-SF-1-LI

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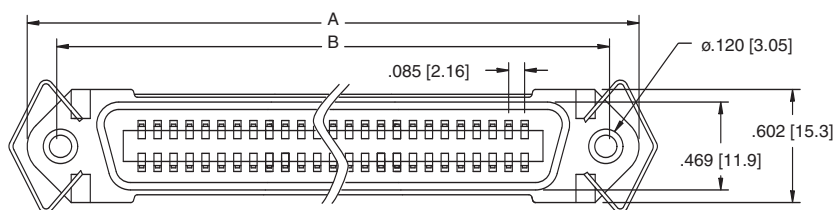
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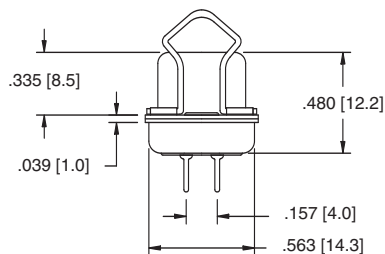
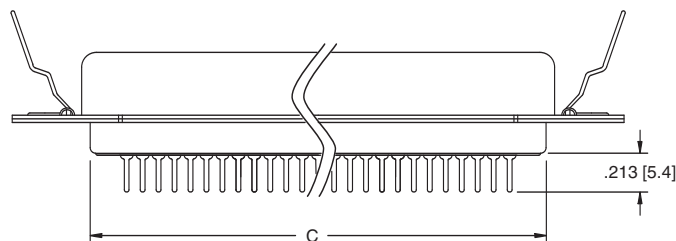
MR50-PC-2



### STRAIGHT PCB TAIL SOCKET



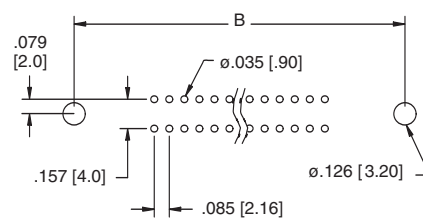
MR50-SC-1-LI



Unit: Inch [mm]

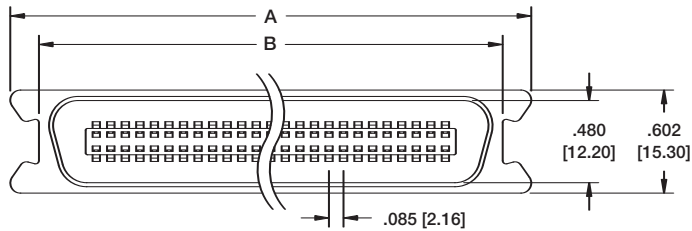
PART NO.	Dimensions	
	A	B
MR14-SC MR14-PC	1.750 [44.45]	1.417 [35.99]
MR24-SC MR24-PC	2.175 [55.25]	1.842 [46.79]
MR36-SC MR36-PC	2.685 [68.20]	2.352 [59.74]
MR50-SC MR50-PC	3.280 [83.31]	2.947 [74.85]

### Recommended PCB Layout

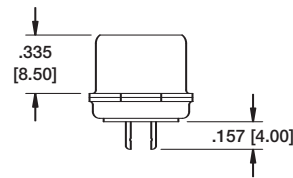
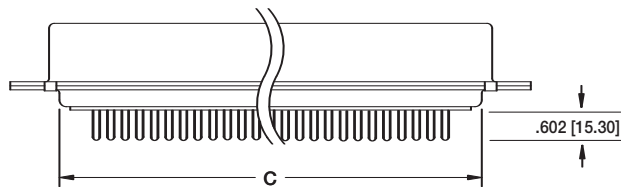


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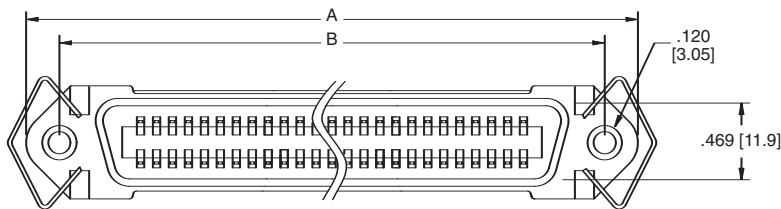
### SOLDER TERMINALS - PLUG



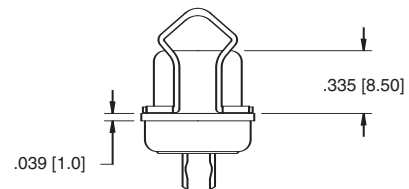
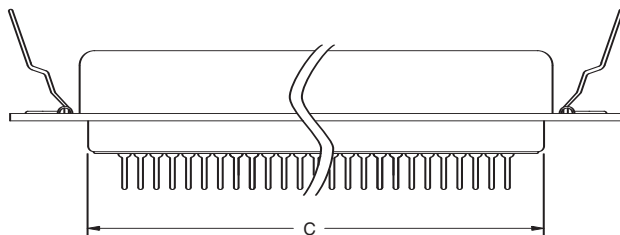
MR36-PA-2



### SOLDER TERMINALS - SOCKET



MR36-SA-1-LI



Unit: Inch [mm]

PART NO.	Dimensions	
	A	B
MR14-SA MR14-PA	1.750 [44.45]	1.417 [35.99]
MR24-SA MR24-PA	2.175 [55.25]	1.842 [46.79]
MR36-SA MR36-PA	2.685 [68.20]	2.352 [59.74]
MR50-SA MR50-PA	3.280 [83.31]	2.947 [74.85]