

### INTRODUCTION:

Adam Tech's wide range of PCI Express, Mini PCI Express & Mini PCI connectors provide a low cost, highly scalable, general-purpose serial I/O interconnect that provides a unifying standard for a number of I/O solutions within one platform. They are typically used in high-speed serial link technology applications similar to that found in Gigabit Ethernet, Serial ATA (SATA), and Serial-Attached SCSI (SAS). The 36P version supports a single PCI express lane and can be used to replace standard PCI connectors. Our higher bandwidth 4 & 8 lane versions are ideal to use in many server applications.

### FEATURES:

- Durable Long Life cycle contacts
- High Pressure Contacts for Low Level Circuits
- Hot plug and hot swap enabled
- Rated to run at up to 2.5Gbps
- Supports 2.5Gbps data transfer and scalable for future band width increases.
- Available in x1, x4, x8, and x16 lane configurations
- Coexists with standard PCI

### MATING PC BOARDS:

All printed circuit boards with a thickness of .062" to .072"

### SPECIFICATIONS:

#### Material:

Standard insulator: PPS, 30% glass reinforced, rated UL94V-0  
 Optional Hi-Temp insulator: Nylon 6T, rated UL94V-0  
 Insulator Color: Dark Brown (Black optional)  
 Contacts: Phosphor Bronze

#### Contact Plating:

Gold over Nickel underplate on contact area, tin over copper underplate on tails.

#### Electrical:

Operating voltage: 125V AC max.  
 Current rating: 3 Amps max.  
 Contact resistance: 20 mΩ max. initial  
 Insulation resistance: 1000 MΩ min.  
 Dielectric withstanding voltage: 500V AC for 1 minute

#### Mechanical:

Insertion force: 7 oz max.  
 Withdrawal force: 0.9 oz min

#### Temperature Rating:

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

#### PACKAGING:

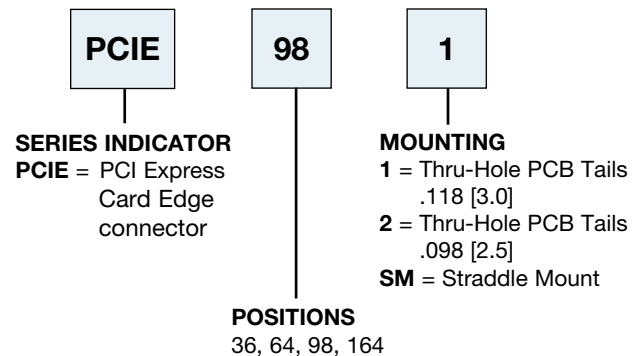
Anti-ESD plastic trays

#### APPROVALS AND CERTIFICATIONS:

UL Recognized & CSA Certified,  
 File no. E224053



### ORDERING INFORMATION PCI EXPRESS



### ORDERING INFORMATION MINI PCI EXPRESS

See pg. 174 for Available Types

### MINI PCI

See pg. 175 for Available Types

#### OPTIONS:

Add designator(s) to end of part number  
**30** = 30 μin gold plating in contact area  
**WT** = White color insulation  
**HT** = Hi-Temp insulator for Hi-Temp soldering processes up to 260°C

PIN 1

A

B

C

D

.343 [8.70]

.039 [1.00]

.459 [11.65]

.070 [1.78]

.398 [10.10]

.165 [4.20]

.039 [1.00]

.053 [1.35]

.012 [0.32]

.394 [10.00]

.071 [1.80]

.065 [1.65]

X

-1 = .118 [3.0]

-2 = .098 [2.5]

**PCI EXPRESS  
THRU HOLE PCB MOUNT**

**PCIE-98-1**

.033 [0.85]

.156 [3.97]

.170 [4.32]

.009 [0.25]

.079 [2.00]

.079 [2.00]

.098 [2.50]

.295 [7.50]

| PART NO. & POSITIONS | DIMENSIONS    |               |               |               |
|----------------------|---------------|---------------|---------------|---------------|
|                      | A             | B             | C             | D             |
| PCIE-36-1            | .984 [25.00]  | .301 [7.65]   | .236 [6.00]   | .321 [8.15]   |
| PCIE-64-1            | 1.535 [39.00] | .852 [21.65]  | .787 [20.00]  | .872 [22.15]  |
| PCIE-98-1            | 2.205 [56.00] | 1.522 [38.65] | 1.457 [37.00] | 1.541 [39.15] |
| PCIE-164-1           | 3.504 [89.00] | 2.821 [71.65] | 2.756 [70.00] | 2.840 [72.15] |

\* Available in Straddle Mount

ø.059 [1.50]

.340 [8.65]

.984 [25.0]

.035 [0.90]

1.024 [26.0]

1.178 [29.90]

.221 [5.6]

.077 [1.95]

.535 [13.6]

.032 [0.80]

.331 [8.4]

.093 [2.35]

.536 [13.6]

.260 [6.6]

.114 [2.9]

.220 [5.6]

1.57 [4.0]

A

B

C

.047 [1.2]

.193 [4.9]

.177 [4.5]

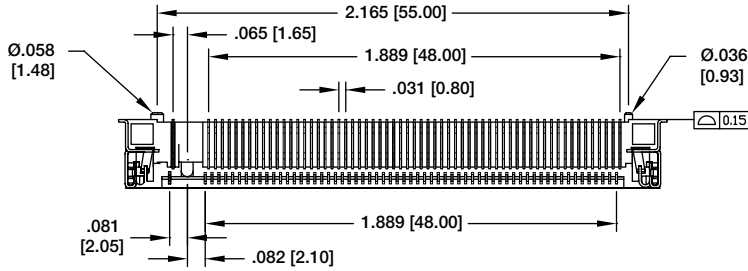
**MINI PCI EXPRESS**

**MPE-52-R-SMT-3.8**

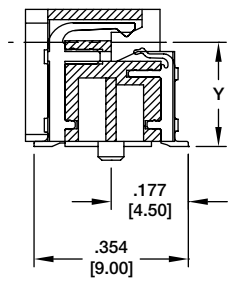
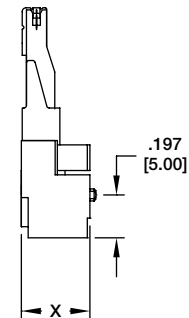
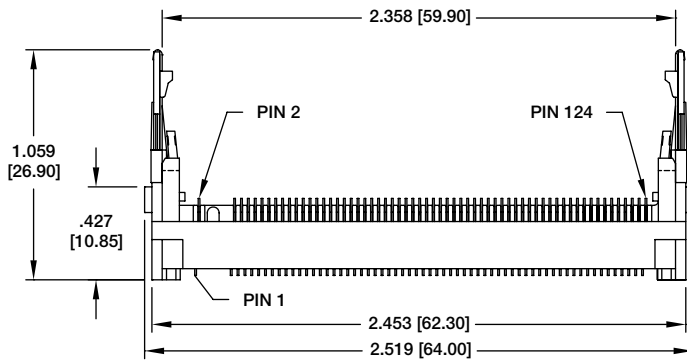
**MPE-52-R-SMT-9.0**

| PART NUMBER         | DIM A | DIM B | DIM C |
|---------------------|-------|-------|-------|
| MPE-52-R-SMT-3.2-TR | 5.20  | 2.80  | 3.20  |
| MPE-52-R-SMT-3.8-TR | 5.60  | 3.20  | 3.80  |
| MPE-52-R-SMT-4.9-TR | 6.80  | 4.40  | 4.90  |
| MPE-52-R-SMT-6.-TR  | 8.00  | 5.60  | 6.10  |
| MPE-52-R-SMT-9.2-TR | 9.20  | 6.80  | 7.30  |

### MINI PCI SURFACE MOUNT



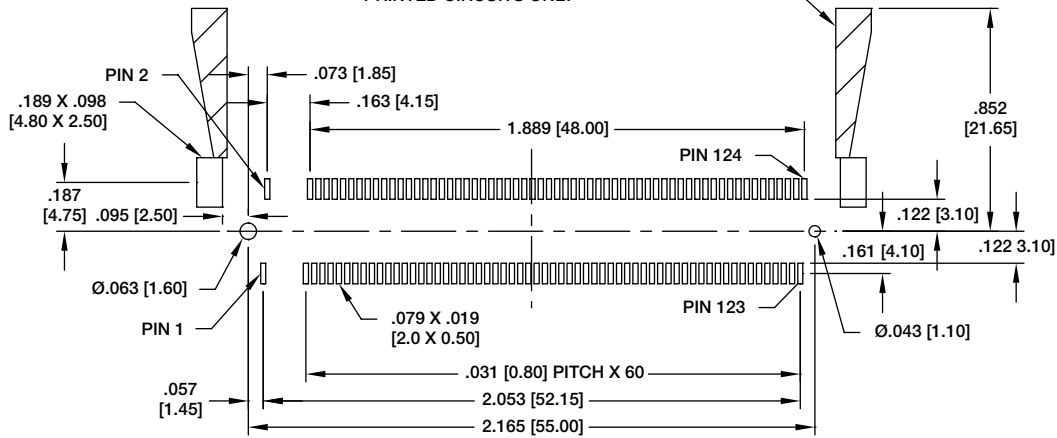
MPC1-124-2-SMT



STANDOFF HEIGHT

(SEE CHART)

LEVER MOVEMENT AREA  
DO NOT MOUNT COMPONENTS IN THIS AREA  
PRINTED CIRCUITS ONLY



Recommended PCB Layout

| PART NO        | DIMENSIONS  |             |
|----------------|-------------|-------------|
|                | X           | Y           |
| MPC1-124-2-SMT | .362 [9.20] | .287 [7.30] |