

## INTRODUCTION:

Adam Tech CE Series Card Edge Connectors are precision engineered PCB mount connectors developed to mate with the plated fingers of a printed circuit daughter board. Their bifurcated, cantilever contacts are set in a dual readout configuration and they offer a reliable connection for wide range of PCB thicknesses. Adam Tech's sturdy solder tails with tapers allow easy insertion and rugged durability.

## FEATURES:

.100" x .200" centerlines  
Selectively gold plated contacts  
Wide selection of positions  
Compatible with a wide range of PCB thicknesses

## MATING PC BOARDS:

All printed circuit boards with a thickness of .055" to .075"

## SPECIFICATIONS:

### Material:

Insulator: PBT, 30% glass reinforced, rated UL94V-0  
Insulator Color: Black  
Contacts: Phosphor Bronze

### Contact Plating:

Gold Flash (30  $\mu$ m Optional) over Nickel underplate on contact area, tin over copper underplate on tails.

### Electrical:

Operating voltage: 250V AC max.  
Current rating: 3 Amps max.  
Contact resistance: 30 m $\Omega$  max. initial  
Insulation resistance: 3000 M $\Omega$  min.  
Dielectric withstanding voltage: 500V AC for 1 minute

### Mechanical:

Insertion force: 10 oz max.  
Withdrawal force: 3 oz min

### Temperature Rating:

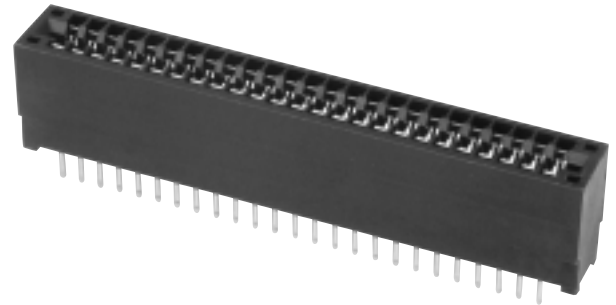
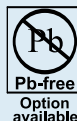
Operating temperature: -40°C to +105°C

## PACKAGING:

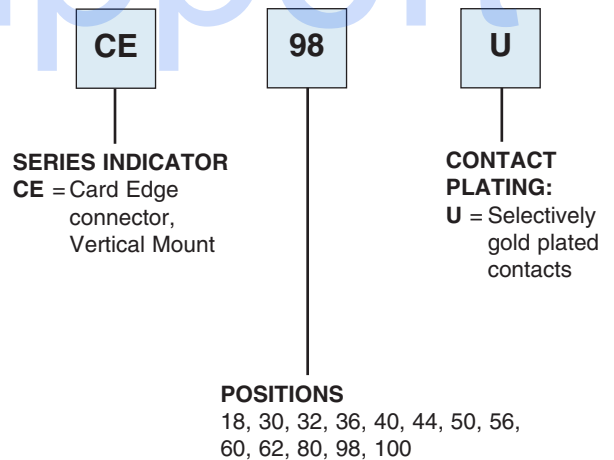
Anti-ESD plastic trays

## SAFETY AGENCY APPROVALS:

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



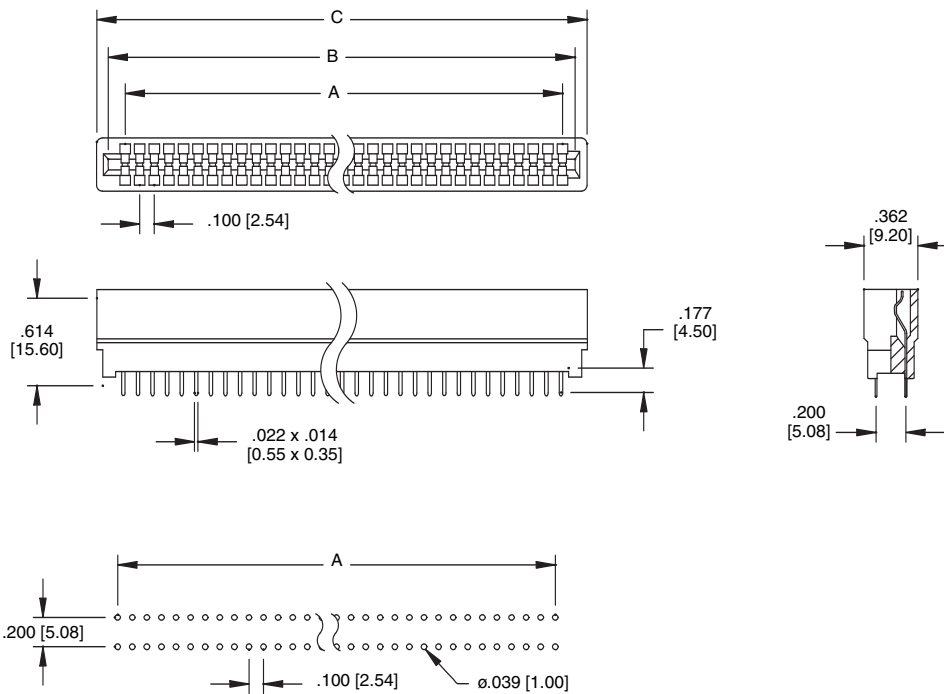
## ORDERING INFORMATION



## OPTIONS:

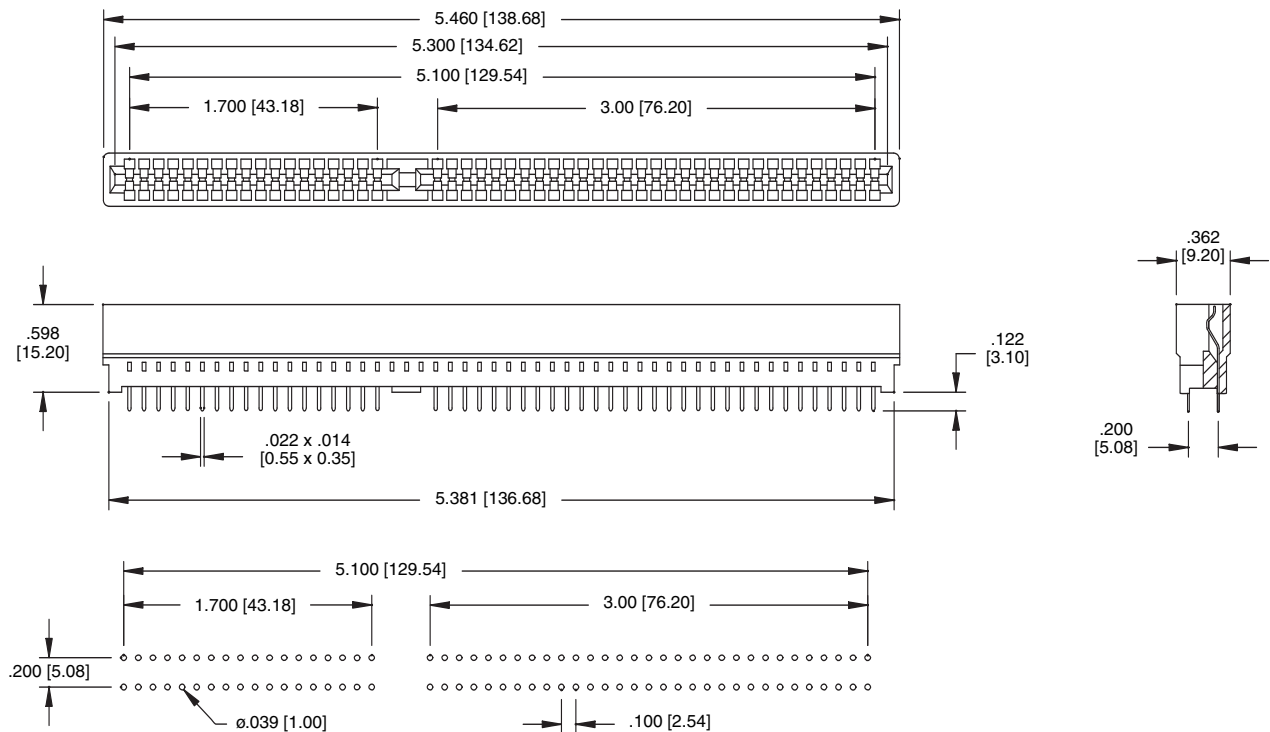
Add designator(s) to end of part number  
30 = 30  $\mu$ m gold plating in contact area  
RC = RoHS compliant lead-free product with Hi-Temp insulator

18P-100P



Recommended PCB Layout

98P



Recommended PCB Layout

### INTRODUCTION:

Adam Tech HDCE Series EISA (Extended Industry Standard Architecture) Card Edge Connectors are .050" pitch 188 position dual level contact connectors specifically designed to mate with AT, XT and PC expansion cards. Our precision formed High Reliability contact system is contained within a Hi-Temp PPS body which features a close tolerance polarizing slot and card edge lead-in area for superior mating.

### FEATURES:

High density .050" Centerlines  
Compatible with PC, XT & AT  
Durable Long Life cycle contacts  
High Pressure Contacts for Low Level Circuits

### MATING PC BOARDS:

All .050" centerline printed circuit board pads with a thickness of .062 to .072"

### SPECIFICATIONS:

#### Material:

Insulator: PPS, 30% glass reinforced, rated UL94V-0  
Insulator Color: Dark Brown (White optional)  
Contacts: Phosphor Bronze

#### Contact Plating:

Gold Flash (30 µin Optional) 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:

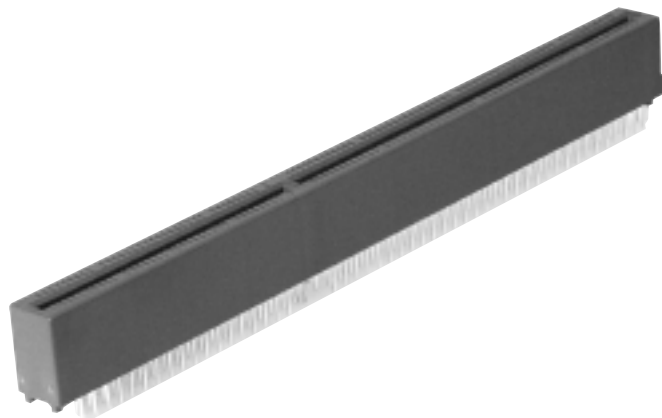
Operating temperature: -55°C to +105°C

### PACKAGING:

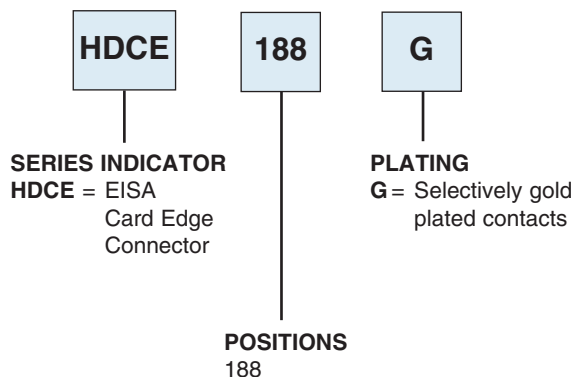
Anti-ESD plastic trays

### APPROVALS AND CERTIFICATIONS:

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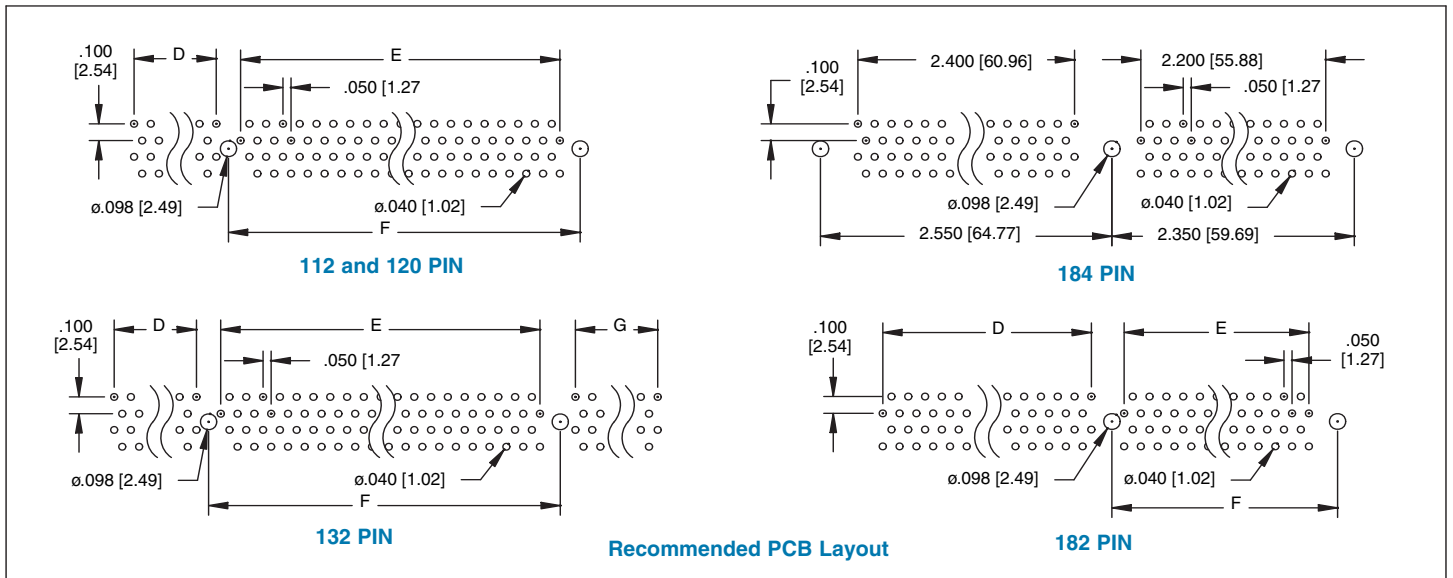
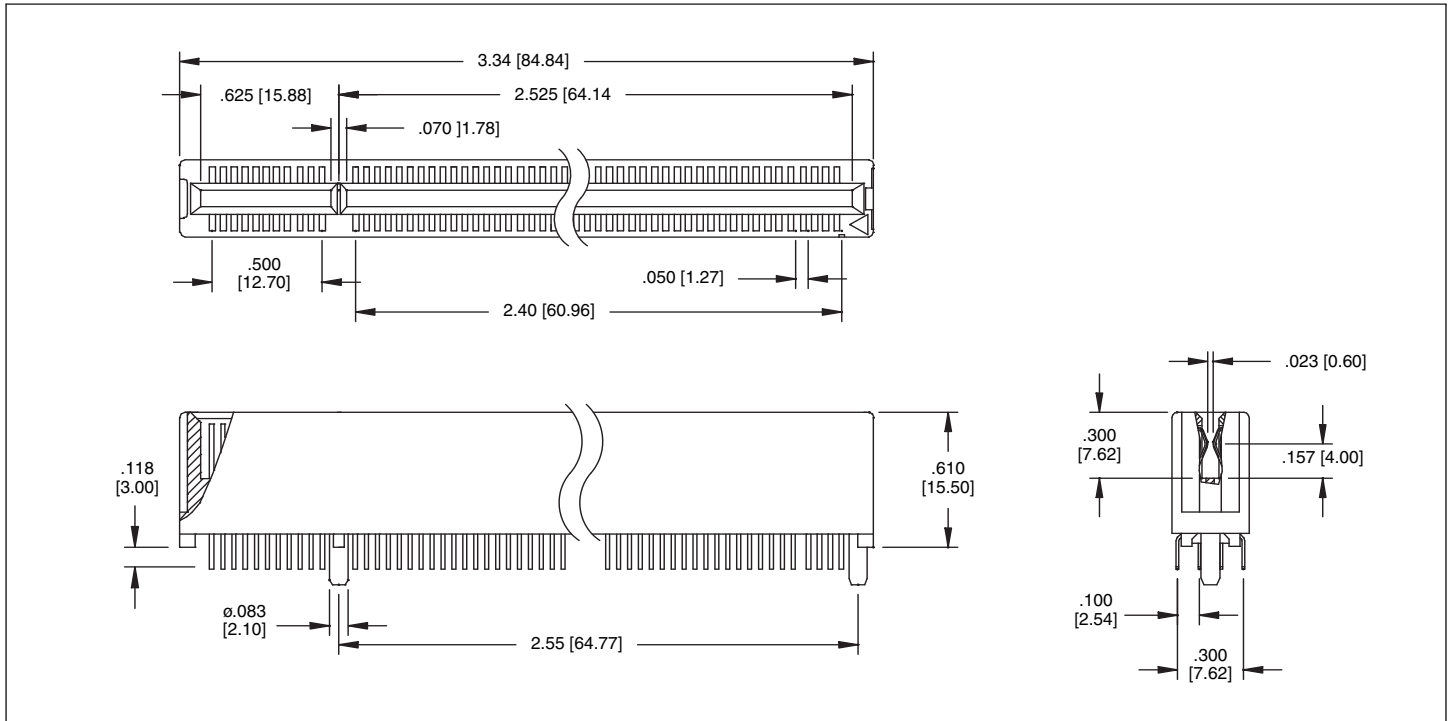


### ORDERING INFORMATION



### OPTIONS:

Add designator(s) to end of part number  
BK = Black color insulation  
RC = RoHS compliant lead-free product  
with Hi-Temp insulator



Unit: Inch / mm

Part No. & Positions	Dimensions:						
	A	B	C	D	E	F	G
HMCA-112-G	3.140 (79.76)	0.625 (15.88)	2.325 (59.06)	0.500 (12.70)	2.200 (55.88)	2.232 (56.69)	—
HMCA-120-G	3.340 (84.84)	0.625 (15.88)	2.525 (64.14)	0.500 (12.70)	2.400 (60.96)	2.550 (64.77)	—
HMCA-132-G	3.740 (95.00)	0.625 (15.88)	2.925 (74.30)	1.834 (46.60)	2.200 (55.88)	2.350 (59.69)	0.450 (11.43)
HMCA-182-G	4.890 (124.21)	2.175 (55.25)	2.525 (64.14)	2.050 (52.07)	2.050 (52.07)	2.550 (64.77)	—
HMCA-194-G	5.290 (134.37)	2.175 (55.25)	2.925 (74.30)	2.050 (52.07)	2.200 (55.88)	2.350 (59.69)	0.450 (11.43)

### INTRODUCTION:

Adam Tech HMCA Series Card Edge Connectors include Standard and Express versions designed for PCB's in Peripheral Component Interconnect (PCI) applications. Each is manufactured in a four row, high density package which is completely compatible to industry standards and has specially engineered contacts which provide a very short electrical path between boards. Adam Tech card edge connectors are designed for high performance with solid board pegs and precision located, selectively gold plated contacts which are ideal in high speed, increased bandwidth applications

### FEATURES:

- PCI and PCI Express Versions
- High density compact designs
- Industry standard PCI compatible
- Special contact design reduces electrical path
- Selectively plated contacts
- Open bottom for after solder cleaning

### MATING PC BOARDS:

All .050" centerline printed circuit board pads with a thickness of .062 to .072"

### SPECIFICATIONS:

#### Material:

Insulator: PPS, 30% glass reinforced, rated UL94V-0  
Insulator Color: Dark Brown (White 120 pos.)  
Contacts: Phosphor Bronze

#### Contact Plating:

Gold Flash (30 µin Optional) over Nickel underplate on contact area, tin over copper underplate on tails.

#### Electrical:

Operating voltage: 125V AC max.  
Current rating: 1 Amps max.  
Contact resistance: 30 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:

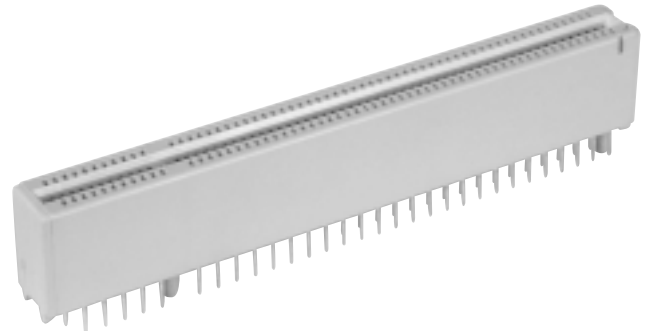
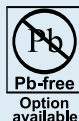
Operating temperature: -55°C to +105°C

### PACKAGING:

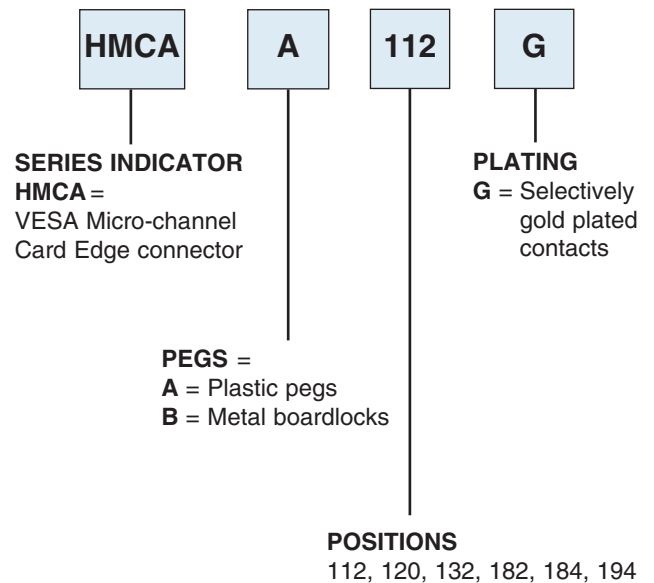
Anti-ESD plastic trays

### SAFETY AGENCY APPROVALS:

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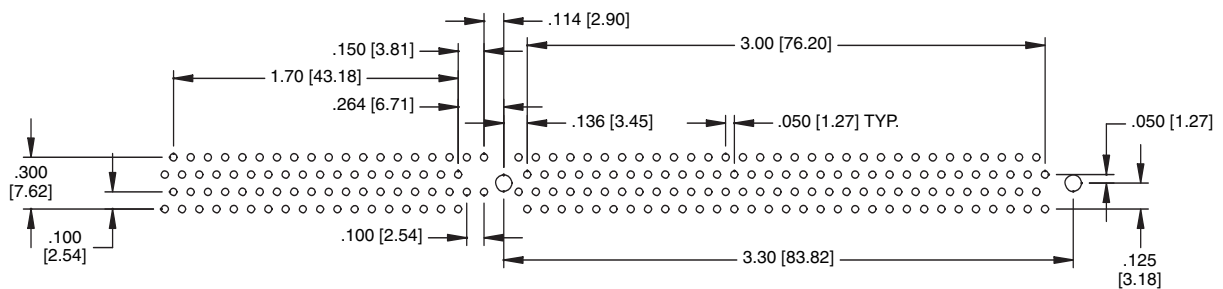
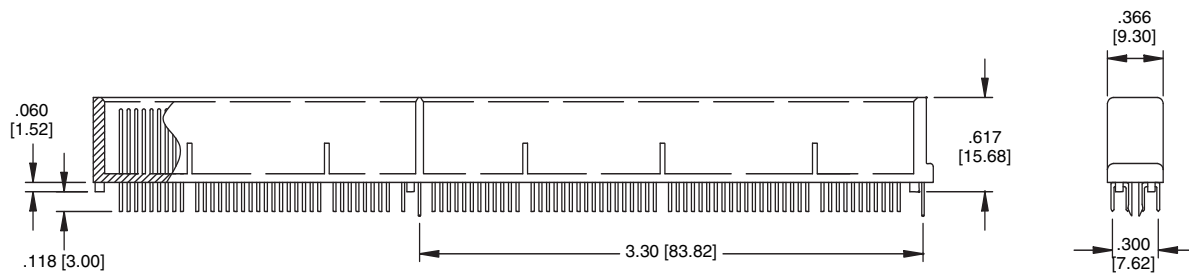
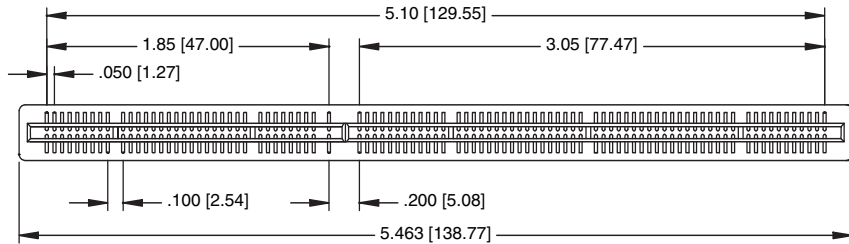
### ORDERING INFORMATION



### OPTIONS

Add designator(s) to end of part number  
RC = RoHS compliant lead-free product  
with Hi-Temp insulator

#### HDCE-188-G



Recommended PCB Layout