

INTRODUCTION:

Adam Tech .050" IDC Connectors are designed for applications where space and weight reduction are key factors. They mate with a variety of male headers in PC board applications for interboard bussing or connecting one sub-system to another. They are ideally suited for hard disk drives, instruments, control units and feature precision stamped selectively gold plated phosphor bronze contacts.

FEATURES:

- High density space saving design
- Mass terminates .025" centerline flat cable
- High pressure wiping contacts
- Underside cap grooves ensure proper cable positioning
- Factory assembled cover protects contacts, aids in proper alignment of cable and speeds assembly

MATING OPTIONS:

Mates with Adam Tech HPH and HBHR Series Headers and all industry standard compatible connectors.

SPECIFICATIONS:

Material:

Insulator: Polybutylene Terephthalate (PBT), glass reinforced thermoplastic, rated UL 94V-0

Insulator color: Black

Contacts: Phosphor bronze

Plating:

G = 5 µin gold nom. (optional 30 µin) to MIL-G-45204, Type II, Grade C min on contact area over 100 µin nickel underplate to QQ-N-290, Class 2, Grade C, gold flash on solder tails

SG = 5 µin gold nom. on mating length to MIL-G-45204, Type II, Grade C, 200 µin tin to MIL-P-81738 on solder tails

T = 200 µin bright tin plate to MIL-T-10727, Type 1 with 100 µin copper underplate to MIL-C-14550

Electrical:

Operation voltage: 250 VAC max

Current rating: 1 Amp max

Contact resistance: 20 mΩ max

Insulation resistance: 1000 MΩ min @ 1000 VDC between adjacent contacts (75° F and 50% R.H.)

Dielectric withstanding voltage: 1000 VAC min rms (sea level)

Mechanical:

Contact Insertion force: 5 ozs. per circuit max

Contact Withdrawal force: 1.5 ozs. per circuit min

Recommended wire size: 28 AWG, stranded

Cable Retention: 22 lbs. min axial force per cable inch

Mating durability: 500 cycles min

Environmental:

Operating temperature: -65°C to +125°C

PACKAGING:

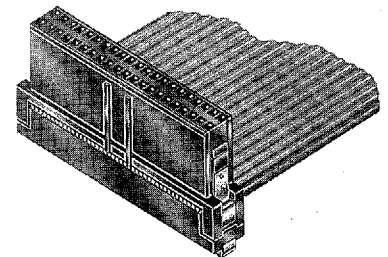
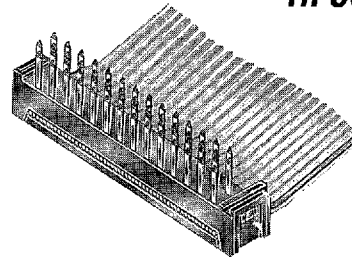
Anti-static plastic trays

APPROVALS AND CERTIFICATIONS:

Recognized under the component program

of Underwriters Laboratories, Inc. No. E167232

Certified by Canadian Standards Association No. LR75112



ORDERING INFORMATION



SERIES INDICATOR

HFCS = Low profile .050" IDC Socket for single layer .025" Flat Cable

HFCS-B = Standard profile IDC Socket for single layer .025" Flat Cable

HFDP = .050" Paddleboard Connector for single layer .025" Flat Cable

PLATING

SG = Selective gold plating in contact area, nickel plating in termination area

T = Tin plated (HFDP)

POSITIONS

HFCS: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100

HFCS-B: 60, 68, 72, 80

HFDP: 30, 50, 68, 72, 80, 100



SERIES INDICATOR

HBHR = .050" Box header

MOUNTING ORIENTATION

V = Vertical mount
H = Right angle mount

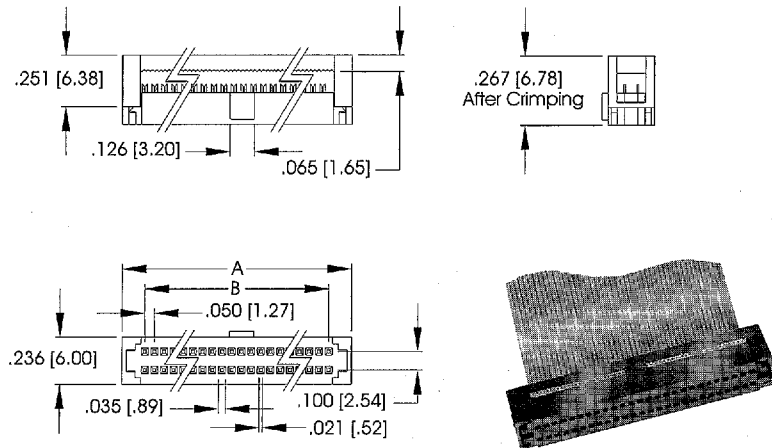
PLATING

G = Gold plated
SG = Selective gold plating in contact area, tin plated solder tails
T = Tin plated

POSITIONS

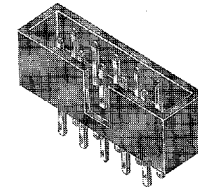
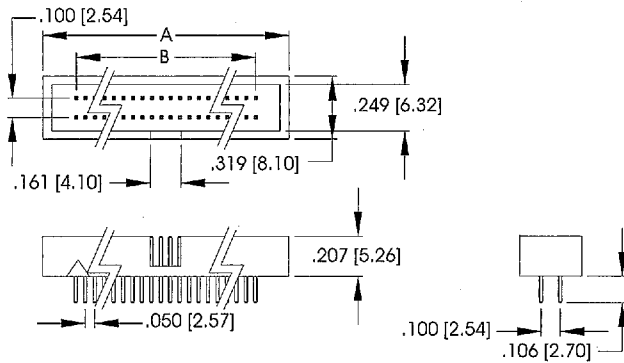
10, 20, 30, 40, 50, 60, 70, 80, 90, 100

HFCS IDC SOCKET FOR SINGLE LAYER .025" FLAT CABLE

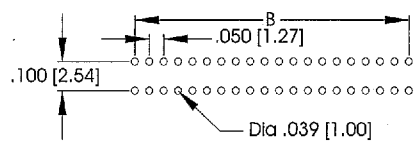


POSITION	Dimension	
	A	B
10	0.200 (11.10)	0.437 (5.08)
20	0.450 (17.45)	0.687 (11.43)
30	0.700 (23.80)	0.937 (17.78)
40	0.950 (30.15)	1.187 (24.13)
50	1.200 (36.50)	1.437 (30.48)
60	1.450 (42.85)	1.687 (36.83)
70	1.700 (49.20)	1.937 (43.18)
80	1.950 (55.55)	2.187 (49.53)
90	2.200 (61.90)	2.437 (55.88)
100	2.450 (68.25)	2.687 (62.23)

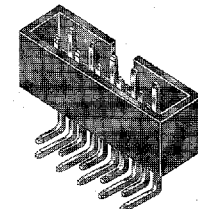
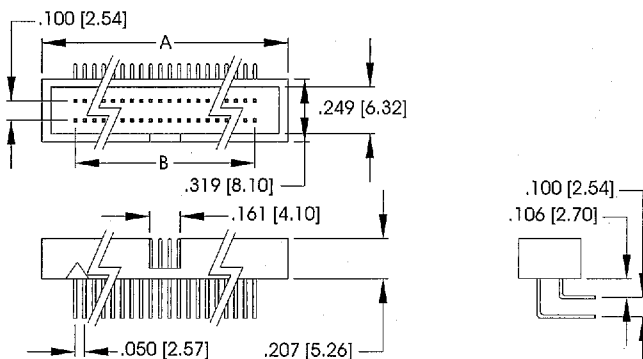
HBHR-A STRAIGHT MOUNT



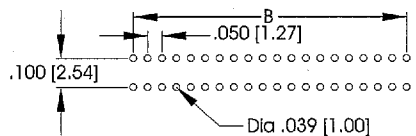
PC Board Layout



HBHR-A RIGHT ANGLE MOUNT



PC Board Layout



A = .050 [1.27] X No. of Positions Per Row + .349 [8.87]
 B = .050 [1.27] X No. of Positions Per Row

9017931 0000216 587

HFDP - FOUR ROW PADDLEBOARD CONNECTOR - .025" FLAT CABLE

HFDP

Technical drawings for HFDP connector showing dimensions and assembly details:

- Side view dimensions: A, B, .025 [.635], .050 [1.27]
- Top view dimensions: .100 [2.54], .308 [7.82], .050 [1.27]
- PC Board Layout dimensions: .050 [1.27], .100 [2.54], .079 [2.00]
- After Crimping dimensions: .277 [7.04], .102 [2.60], .012 [.305], .079 [2.00]
- Metal Strain Relief dimension: .265 [6.73]

*This series uses one layer of .025" Centerline Flat Cable for a lightweight, low profile, one-step, one-operation termination.

HFCS-B DUAL ROW IDC SOCKET - .025" FLAT CABLE

HFCS-B

Technical drawings for HFCS-B connector showing dimensions and assembly details:

- Side view dimensions: A, B, .192 [4.88], .485 [12.32] (After Crimping)
- Top view dimensions: .100 [2.54], .050 [1.27], C
- After Crimping dimensions: .265 [6.73], .120 [3.05], .200 [5.08]
- Center Polarizing Bump
- Metal Strain Relief

*This series uses one layer of .025" Centerline Flat Cable for a lightweight, low profile, one-step, one-operation termination.

HFDP Series - Dimensional:			
POSITION	A	B	C
60	1.700 (43.18)	1.543 (39.18)	1.450 (36.83)
68	1.900 (48.26)	1.743 (44.26)	1.650 (41.91)
72	2.000 (50.80)	1.843 (46.80)	1.750 (44.45)
80	2.200 (55.88)	2.043 (51.88)	1.950 (49.53)

HFCS-B Series - Dimensional:		
POSITION	A	B
30	0.954 [24.24]	0.700 [17.78]
50	1.453 [36.90]	1.200 [30.48]
68	1.902 [48.30]	1.650 [41.91]
72	2.008 [51.00]	1.950 [44.45]