

### INTRODUCTION:

Adam Tech FCS Series .100" IDC Sockets are extremely popular, low profile, precision designed flat cable sockets that feature .100" pin to pin and row to row centerlines. These sockets quickly and easily mass terminate flat cable in one simple step. Their versatility allows them to mate with a multitude of .025" sq. post pin headers. Our superior selectively gold plated contact design provides a smooth high pressure wiping action to ensure excellent continuity. They are used with a single layer of .050" flat cable. Their small size, light weight, low cost and high density make them ideal for use in many applications.

### FEATURES:

Choice of Single or Dual beam contact design  
Low Profile and High Density  
Uses Single layer .050" standard Flat Cable  
Quickly and easily mass terminates Flat Cable  
Smooth High Pressure Wiping Contacts

### MATING CONNECTORS:

Adam Tech .100" BHR series box headers and PH2 series pin headers

### SPECIFICATIONS:

#### Material:

Insulator: PBT, 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 IDC area

#### Electrical:

Operating voltage: 250V AC max.  
Current rating: 1 Amp max.  
Contact resistance: 30 m $\Omega$  max. initial  
Insulation resistance: 1000 M $\Omega$  min.  
Dielectric withstanding voltage: 500V AC for 1 minute

#### Mechanical:

Insertion force: FCS-D2: 0.5 lbs per contact max.  
Withdrawal force: FCS-D2: 0.094 lbs per contact min.  
Recommended wire size: 28 Awg stranded  
Cable retention: 28 lbs. min axial force per inch.  
Mating durability: 500 cycles min.

#### Temperature Rating:

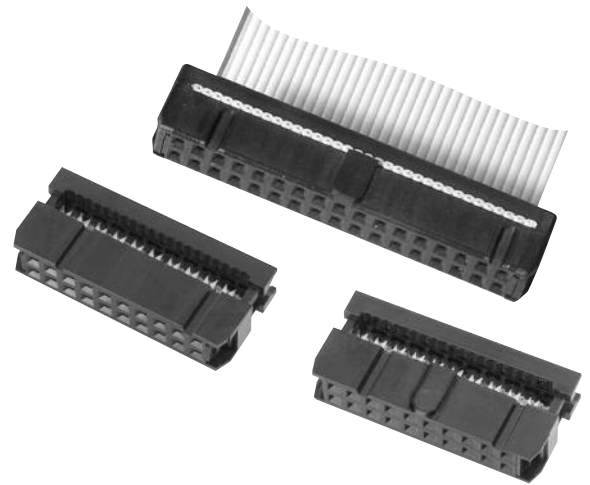
Operating temperature: -40°C to +105°C

### PACKAGING:

Anti-ESD plastic trays

### SAFETY AGENCY APPROVALS:

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



### ORDERING INFORMATION

FCS

50

SG

#### SERIES INDICATOR

FCS = Flat Cable  
IDC Socket  
with standard  
single wipe  
contacts

FCS-D2 = Flat cable  
IDC socket  
with dual  
wipe contacts

#### PLATING

SG = Selective  
gold plating

#### POSITIONS

06, 08, 10, 12, 14, 16, 20,  
24, 26, 30, 34, 40, 44, 50,  
56, 60, 62, 64

**Note:** Mating box headers  
for this series  
located on page 257

#### STRAIN RELIEF:

FSR - XX (XX = No. of Positions)

#### PULL TABS:

PT - (No. of positions)

#### KEYING PLUGS:

FCS-K (Key plugs can also be molded into connector,  
consult factory)

#### OPTIONS:

Add designator(s) to end of part number

30 = 30  $\mu$ m gold in contact area

GY = Gray color insulator

N = No polarization bump