

# 50Ω HIGH ISOLATION RF CABLE ASSEMBLY

## SPECIFICATIONS

For complete specifications and recommended PCB layouts see [www.samtec.com?IJ5C](http://www.samtec.com?IJ5C)

### Insulator Material:

Black LCP

### Contact Material:

Copper Alloy

### Pin Material:

Copper Alloy

### Dielectric Material:

Black LCP

### Plating:

Au over 50μ" (1.27 μm) Ni

### Operating Temp Range:

-40°C to +90°C

### RoHS Compliant:

Yes

Mates with:  
IP5



- Edge Rate® Contacts
- Positive Latching

Single or  
Double Ended

High  
performance  
26 AWG  
coax cable

Positive latching  
system

1, 2, 4, 6 or 8  
Positions

## RECOGNITIONS

For complete scope of  
recognitions see  
[www.samtec.com/quality](http://www.samtec.com/quality)



### Cable (-1):

#### Conductor Size:

26 AWG,  
(0.48 mm) .019" dia.

#### Conductor Material:

Silver Plated Copper

#### Insulator Diameter:

(1.27 mm) .050"

#### Insulator Material:

Foamed FEP

#### Shield Material:

Silver Plated Copper

#### Jacket Material:

FEP

#### Jacket Diameter:

(1.80 mm) .071"

#### Bend Radius:

3.175 mm

#### Impedance:

50Ω

#### Current Rating:

2.5A

RoHS Compliant: Yes

### Cable (-2):

#### Conductor Size:

26 AWG,  
(0.51 mm) .020" dia.

#### Conductor Material:

Silver and Copper  
Plated Steel Wire

#### Insulator Diameter:

(1.52 mm) .060"

#### Insulator Material:

PTFE

#### Shield Material:

Silver Plated Copper Wire

#### Jacket Material:

FEP

#### Jacket Diameter:

(2.54 mm) .100"

#### Bend Radius:

12.7 mm

#### Impedance:

50Ω

#### Current Rating:

5A DC

RoHS Compliant: Yes

#### Note:

This Series is non-standard,  
non-returnable.

| 1 Meter Cable Assembly | Frequency           |
|------------------------|---------------------|
| Insertion Loss = 3 dB  | 9.5 GHz / 19.0 Gbps |
| Return Loss = 15 dB    | 2.2 GHz / 4.4 Gbps  |
| VSWR = 1.4             | 2.1 GHz / 4.2 Gbps  |
| Isolation = 60 dB      | 3.1 GHz / 6.2 Gbps  |

Performance and complete test data available at  
[www.samtec.com?IJ5C](http://www.samtec.com?IJ5C) or contact [sig@samtec.com](mailto:sig@samtec.com)

| IJ5C | NO. OF POSITIONS        | ASSEMBLED LENGTH                                                                             | PLATING OPTION                            | END OPTION                                       | END 2 OPTION                                                                         | CABLE TYPE                                             |
|------|-------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------|--------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------|
|      | -01, -02, -04, -06, -08 | - "XXXX"<br>= Assembled Length<br>in millimeters<br>-0100 to -1000<br>(100 mm) 3.94" minimum | -S<br>= 30μ" (0.76 μm)<br>Gold on contact | -S<br>= Single Ended<br><br>-D<br>= Double Ended | -NUS<br>= Notch up, straight P1 to P1<br><br>-NDS<br>= Notch down, straight P1 to PN | -1<br>= CTB-2650F-01 cable<br><br>-2<br>= RG 316 cable |

| NO. OF POSITIONS | A             |
|------------------|---------------|
| -01              | (20.87) .822  |
| -02              | (24.87) .979  |
| -04              | (32.87) 1.294 |
| -06              | (40.87) 1.609 |
| -08              | (48.87) 1.924 |

