

(4.00 mm) .1575"

IP5, IP5-RA SERIES

50Ω HIGH ISOLATION RF PLUGS

SPECIFICATIONS

For complete specifications and recommended PCB layouts see www.samtec.com?IP5

Shell Material: Copper Alloy
Insulator Material: Black LCP
Contact Material: Copper Alloy
Dielectric Material: Black LCP
Plating: Au or Sn over 50µ" (1.27 µm) Ni
Current Rating (Vertical): Signals: 2.36 A per pin (2 adjacent pins powered) Grounds: 4.4 A per pin (2 adjacent pins powered)
Operating Temp Range: -55°C to +125°C
Insulation Resistance: IP5 = >35,000 MΩ IP5-RA = 25,000 MΩ
Contact Resistance: IP5 = Center: <34 mΩ IP5 = Outer: <7 mΩ IP5-RA = Center: 20 mΩ IP5-RA = Outer: 5 mΩ
Dielectric Withstanding Voltage: IP5 = 600 VAC IP5-RA = 190 VAC
Working Voltage: IP5 = 200 VAC IP5-RA = 190 VAC
RoHS Compliant: Yes

Processing:
 Lead-Free Solderable: Yes

RECOGNITIONS

For complete scope of recognitions see www.samtec.com/quality



ALSO AVAILABLE (MOQ Required)

- Other stack heights
- Other PCB thicknesses
- Contact Samtec.

OTHER SOLUTIONS

- 75Ω Board-to-Board system (see IJ7 & IP7 Series)

IP5 — **PLUGS PER ROW** — **05.0** — **PLATING** — **ROW OPTION** — **TAIL** — **OPTION** — **TR**

Mates with: IJ5, IJ5C

-01, -02, -04, -06, -08

-L = 10µ" (0.25 µm) Gold on contact area, Matte Tin on tail

-S = Single Row
 -D = Double Row (Not available with -01)

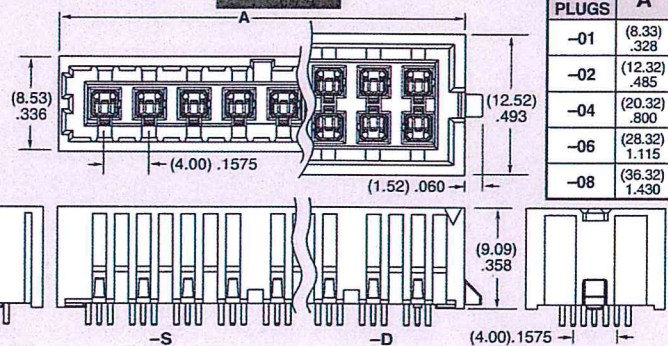
-1 = (1.60 mm) .062" board thickness

-L = Cable Latch (Single Row only)

-TR = Tape & Reel

IP5/IJ5 10 mm Stack Height	Frequency
Insertion Loss = 3 dB	10.5 GHz / 21.0 Gbps
Return Loss = 15 dB	5.5 GHz / 11.0 Gbps
VSWR = 1.4	5.4 GHz / 10.8 Gbps
Isolation = 60 dB	8.8 GHz / 17.6 Gbps
Isolation = 70 dB	7.6 GHz / 15.2 Gbps
Isolation = 80 dB	1.3 GHz / 2.6 Gbps

Complete test data available at www.samtec.com?IP5 or contact sig@samtec.com



NO. OF PLUGS	A
-01	(8.33) .328
-02	(12.32) .485
-04	(20.32) .800
-06	(28.32) 1.115
-08	(36.32) 1.430

IP5 — **PLUGS PER ROW** — **01** — **PLATING** — **S** — **TAIL OPTION** — **OPTION** — **TR**

Mates with: IJ5, IJ5C

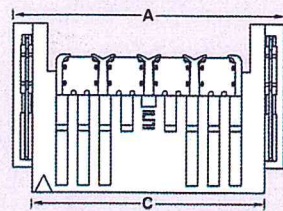
-02, -04, -06, -08

-L = 10µ" (0.25 µm) Gold on contact area, Matte Tin on grounds, tails & weld tabs

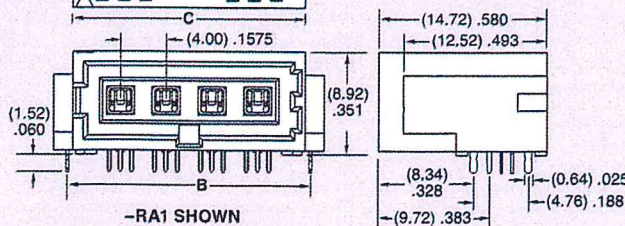
-RA1 = (1.60 mm) .062" board thickness

(Leave blank for no Cable Latch)
 -L = Cable Latch

-TR = Tape & Reel



NO. OF PLUGS	A	B	C
-02	(15.64) .616	(13.27) .523	(12.32) .485
-04	(23.64) .931	(21.27) .838	(20.32) .800
-06	(31.64) 1.246	(29.27) 1.153	(28.32) 1.115
-08	(39.64) 1.561	(37.27) 1.468	(36.32) 1.430



APPLICATION

