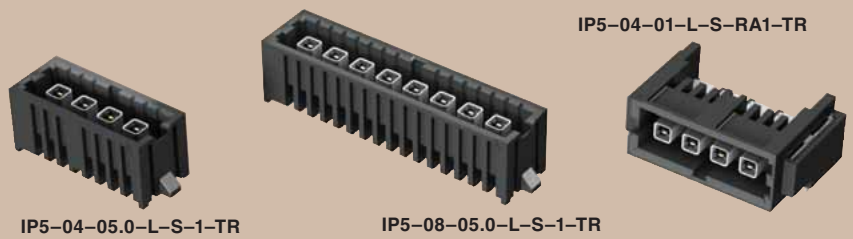


(4,00 mm) .1575"

IP5, IP5-RA SERIES



IP5-04-05.0-L-S-1-TR

IP5-08-05.0-L-S-1-TR

IP5-04-01-L-S-RA1-TR

# 50Ω HIGH ISOLATION RF PLUGS

## SPECIFICATIONS

For complete specifications and recommended PCB layouts see [www.samtec.com?IP5](http://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:**  
 -40°C to +90°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](http://www.samtec.com/quality)



## ALSO AVAILABLE (MOQ Required)

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

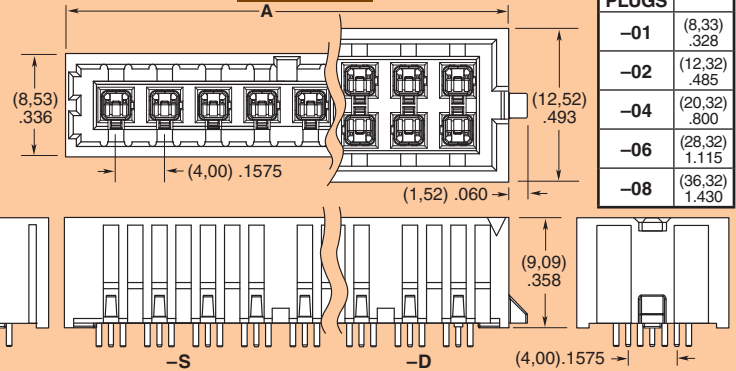
## OTHER SOLUTIONS

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

<b>IP5</b>	<b>PLUGS PER ROW</b>	<b>05.0</b>	<b>PLATING</b>	<b>ROW OPTION</b>	<b>TAIL</b>	<b>OPTION</b>	<b>TR</b>
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

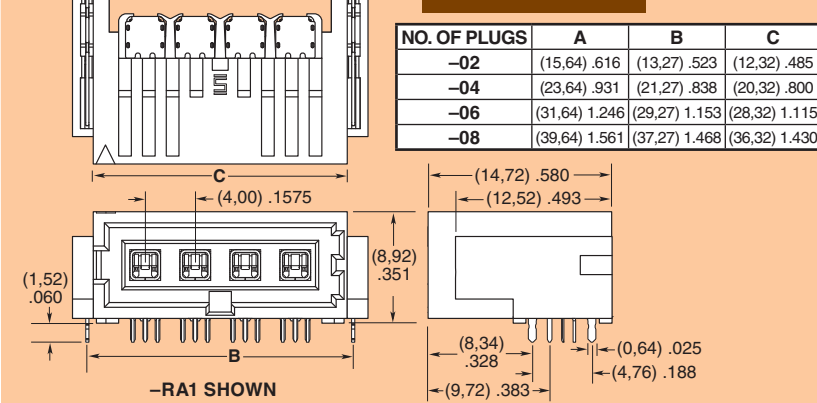
IP5/IJ5 10 mm Stack Height	Frequency
Insertion Loss = 3 dB	10.5 GHz / 21.0 Gbps
Return Loss = 15 dB	5.5 GHz / 11.0 Gbps
VSWR = 1.4	5.4 GHz / 10.8 Gbps
Isolation = 60 dB	8.8 GHz / 17.6 Gbps
Isolation = 70 dB	7.6 GHz / 15.2 Gbps
Isolation = 80 dB	1.3 GHz / 2.6 Gbps

Complete test data available at [www.samtec.com?IP5](http://www.samtec.com?IP5) or contact sig@samtec.com

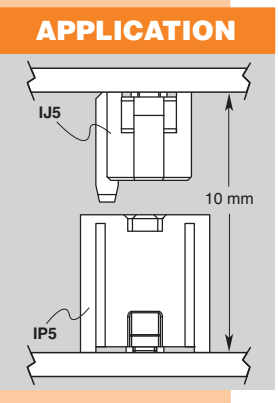


NO. OF PLUGS	A
-01	(8,33) .328
-02	(12,32) .485
-04	(20,32) .800
-06	(28,32) 1.115
-08	(36,32) 1.430

<b>IP5</b>	<b>PLUGS PER ROW</b>	<b>01</b>	<b>PLATING</b>	<b>S</b>	<b>TAIL OPTION</b>	<b>OPTION</b>	<b>TR</b>
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



Due to technical progress, all designs, specifications and components are subject to change without notice.

[WWW.SAMTEC.COM](http://WWW.SAMTEC.COM)