



IP7-06-01-L-S-RA1-TR



IP7-02-05.0-L-S-1-TR



IP7-04-01-L-S-RA1-TR

(4.00 mm) .1575"

IP7, IP7-RA SERIES

# 75Ω HIGH ISOLATION RF PLUGS

## SPECIFICATIONS

For complete specifications and recommended PCB layouts see [www.samtec.com?IP7](http://www.samtec.com?IP7)

**Shell Material:**

Copper Alloy  
**Insulator Material:**  
 Black LCP

**Contact Material:**

Copper Alloy

**Pin Material:**

Copper Alloy

**Dielectric Material:**

Natural LCP

**Plating:**

Au or Sn over 50μ" (1.27 μm) Ni

**Current Rating (Vertical):**

Signals: 2.2 A per pin (2 adjacent pins powered)

Grounds: 6.3 A per pin (2 adjacent pins powered)

**Operating Temp Range:**

-55°C to +125°C

**Insulation Resistance:**

IP7 = 10,000 MΩ

IP7-RA = 100,000 MΩ

**Contact Resistance:**

IP7 = Signal: 26 mΩ

IP7 = Grounds: 2.7 mΩ

IP7-RA = Signal: 31.4 mΩ

IP7-RA = Grounds: 4.6 mΩ

**Impedance:**

75Ω

**Dielectric Withstanding Voltage:**

IP7 = 1950 VAC

IP7-RA = 675 VAC

**Working Voltage:**

IP7 = 650 VAC

IP7-RA = 225 VAC

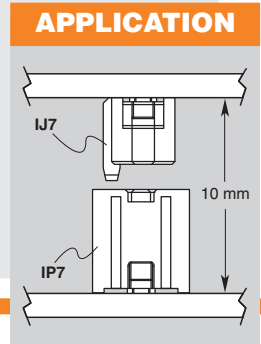
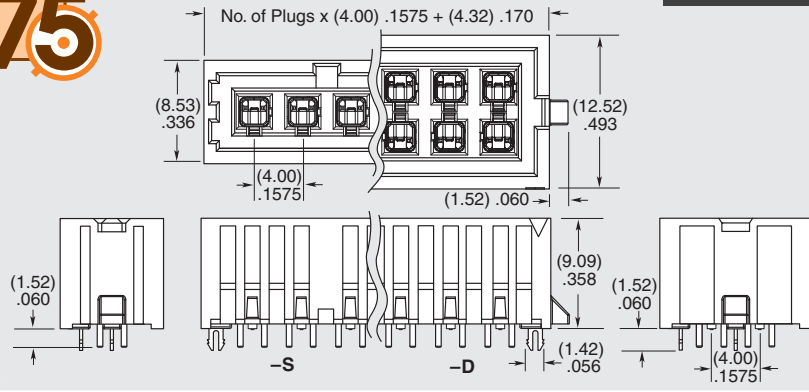
RoHS Compliant: Yes

**Processing:**

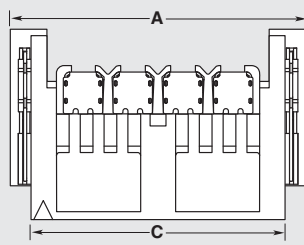
Lead-Free Solderable: Yes



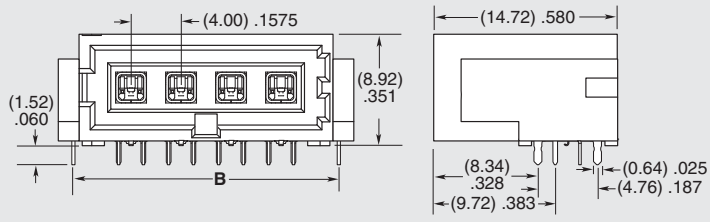
<b>IP7</b>	<b>PLUGS PER ROW</b>	<b>05.0</b>	<b>PLATING</b>	<b>ROW OPTION</b>	<b>TAIL</b>	<b>TR</b>
Mates with: IJ7	-01, -02, -04, -06, -08	-L = 10μ" (0.25 μm) Gold on contact area, Matte Tin on tail	-S = Single Row -D = Double Row (Not available with -01)	-1 = (1.60 mm) .062" board thickness	-TR = Tape & Reel	



<b>IP7</b>	<b>PLUGS PER ROW</b>	<b>01</b>	<b>PLATING</b>	<b>S</b>	<b>TAIL OPTION</b>	<b>TR</b>
Mates with: IJ7	-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	-TR = Tape & Reel		



NO. OF PLUGS	A	B	C
-02	(15.64) .616	(13.23) .521	(12.32) .485
-04	(23.64) .931	(21.23) .836	(20.32) .800
-06	(31.64) 1.246	(29.24) 1.151	(28.32) 1.115
-08	(39.64) 1.561	(37.24) 1.466	(36.32) 1.430



**OTHER SOLUTIONS**

- 50Ω Board-to-Board system (see IJ5 & IP5 Series)

## 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.

**Note:** Designed to meet SMPTE 424M 3G SDI specifications.