

MPD0710S2

2 way Power Splitter/Combiners



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Applications

1. Multi-frequency signal combined
2. Indoor antenna distribution system Balanced Amplifiers
3. Multi-frequency Small Cell & Pico

Features

4. Low Insertion Loss 0.5dB typ based on IPD technology
5. Based on IPD technology
6. High isolation
7. Frequency covers a wide range of applications
8. AECQ-200 qualified

Description

The MPD0710S2 is a low cost, high performance two ways power splitters in an easy to use surface mount package. It is ideal for multi-frequency signal combined, indoor antenna distribution system and multi-frequency Small Cell & Pico.

MPD0710S2 is Based on IPD technology which possess excellent electrical and mechanical stability. All components are 100% RF tested.

Electrical Specifications

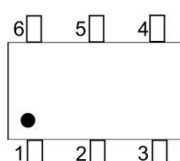
Table 1. MPD0710S2 Electrical Specifications

Item	Min.	Type.	Max.	Unit
Frequency Range	700		1000	MHz
Insertion Loss (above 3 dB)		0.5	0.8	dB
Isolation	18	20		dB
Amplitude Unbalance	-0.5	0.2	+0.5	
Phase Unbalance	-5	2	+5	Deg.
VSWR (Port 2)		1.2	1.3	:1
VSWR (Port 4,6)			1.3	:1
Operating Temp.	-55		+105	°C
Power Input (sum port)			2	Watt

All the above data are based on specified demo board and tested in 25° environment.

Port Configurations

Figure 1. MPD0710S2 Port Configurations (Top View)



Pin #	Connection
1/3/5	GND
2	In
4/6	Out

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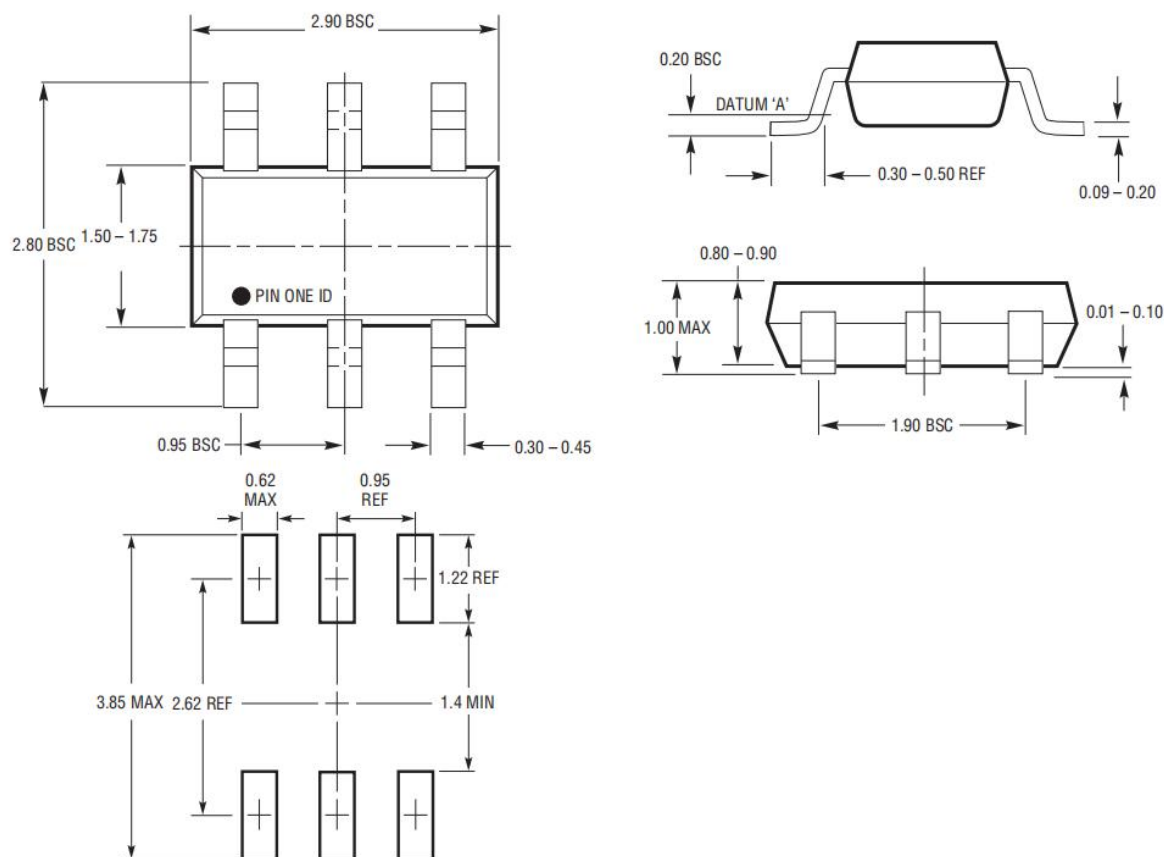
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Outline Drawing

Figure 2. MPD0710S2 Outline Drawing



Typical Performance

Figure 3. MPD0710S2 Insertion Loss (6, 2)

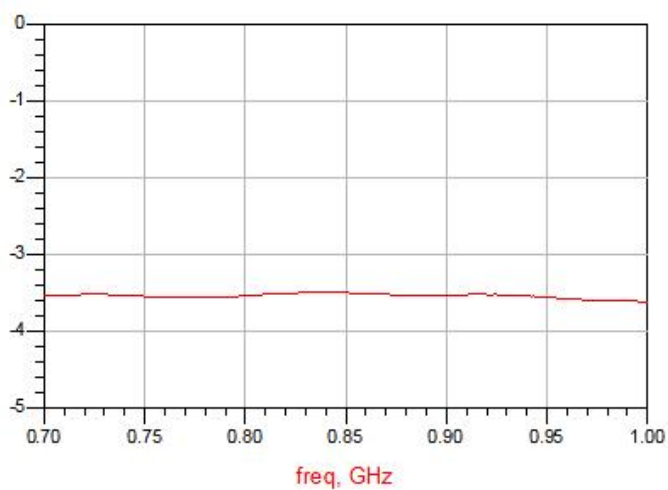
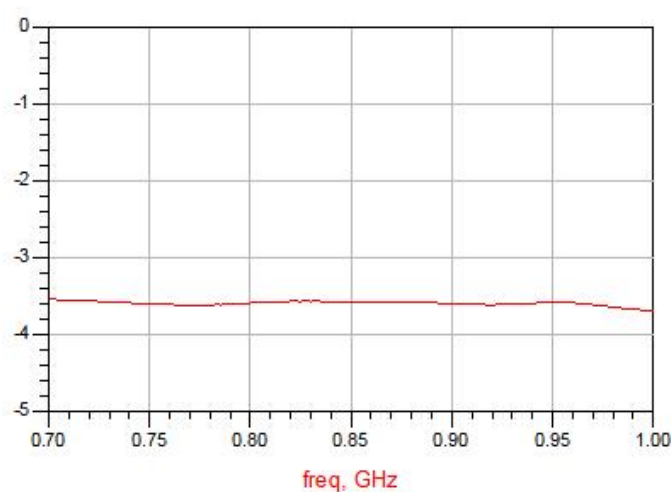


Figure 4. MPD0710S2 Insertion Loss (4, 2)



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Figure 5. MPD0710S2 Return Loss (S2, 2)

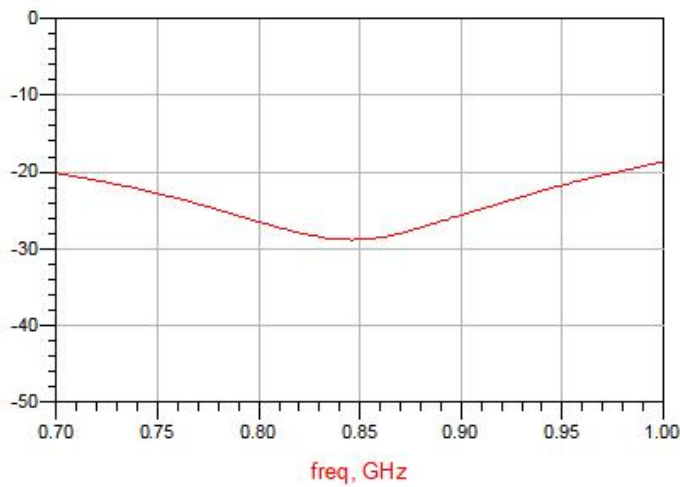


Figure 6. MPD0710S2 Return Loss (S4, 4)

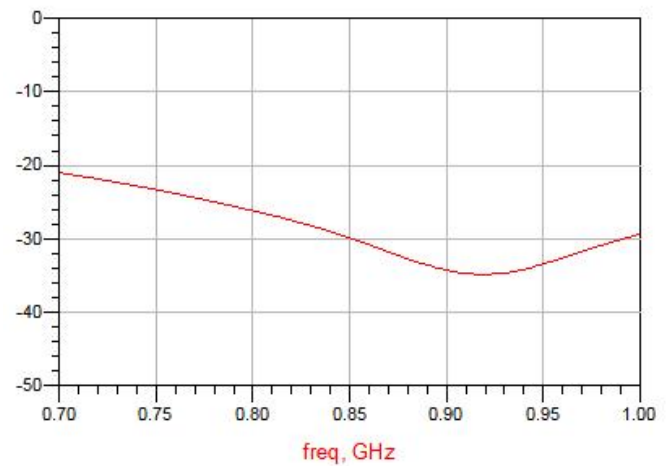


Figure 7. MPD0710S2 Return Loss (S6, 6)

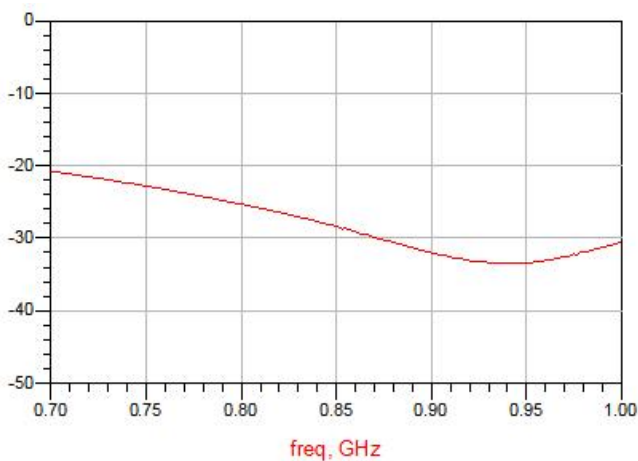


Figure 8. MPD0710S2 Isolation (S4, 6)

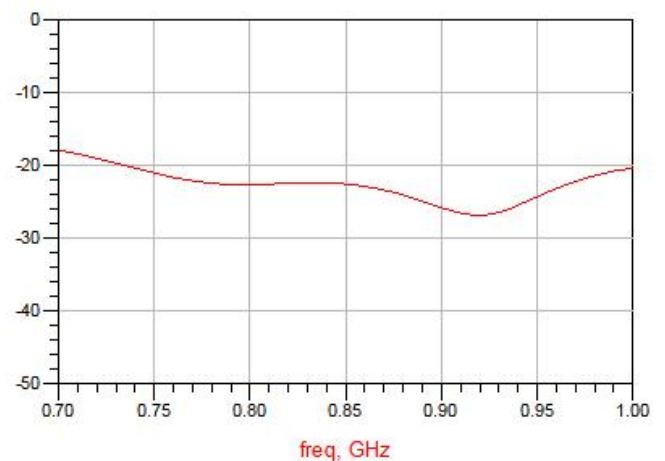
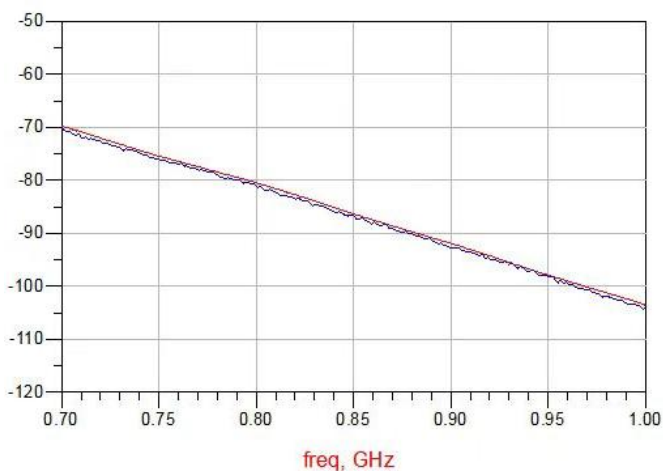


Figure 9. MPD0710S2 phase



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Packaging and Ordering Information

Figure 10. MPD0710S2 Packaging Specifications

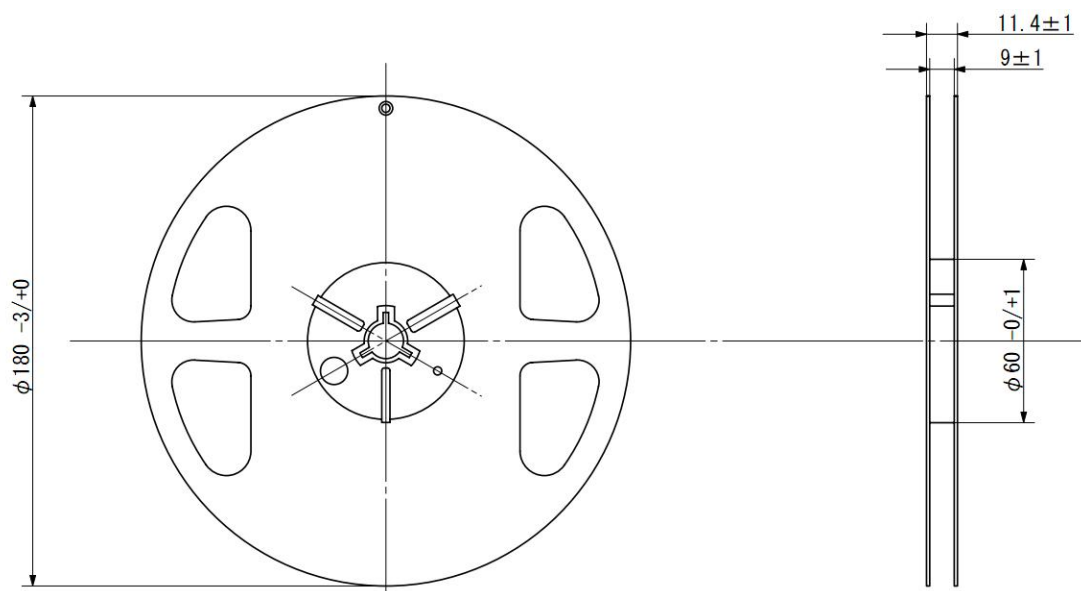


Table 2. MPD0710S2 Ordering Information

Device	Package	Reel	Shipping
MPD0710S2	SOT23-6	7"	3000/Reel

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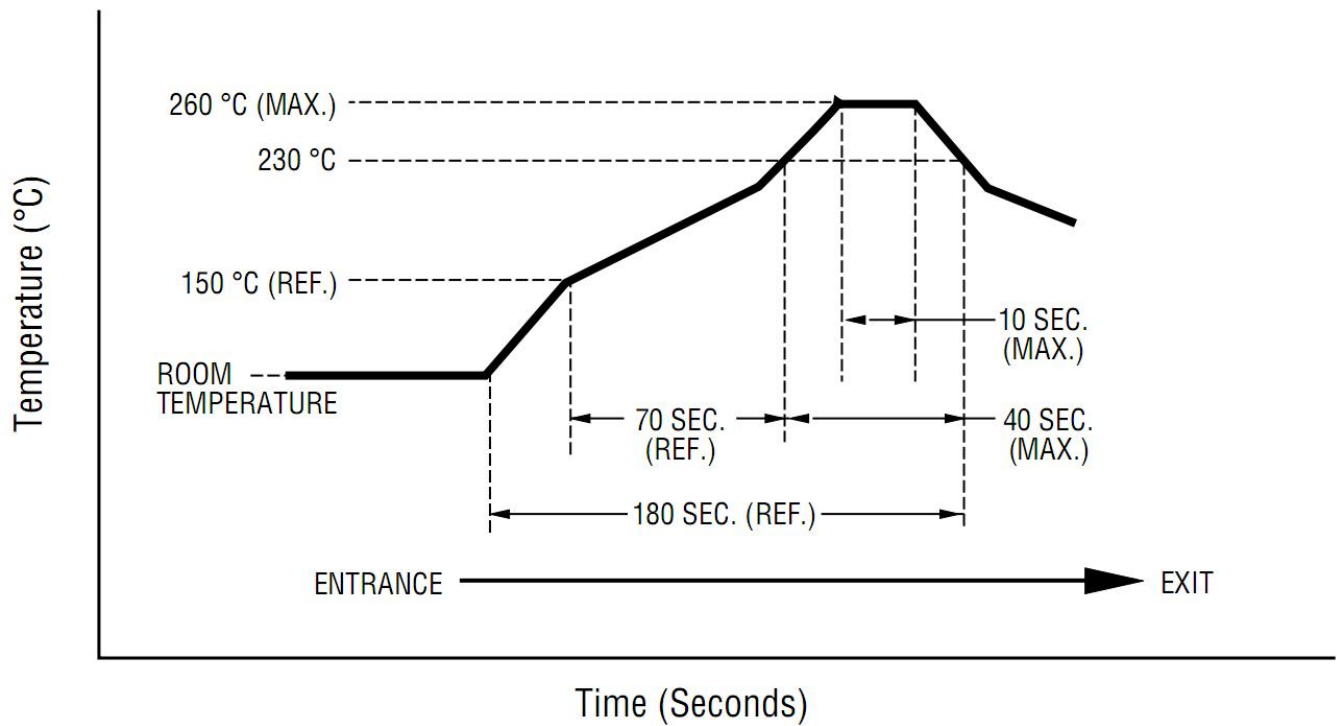
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Recommended Reflow Solder Profile

Figure 11. MPD0710S2 Recommended Reflow Solder Profile



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Revision	Description	Date
Rev0	Preliminary	2021/10/28

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