

MDPX06091727D21

Diplexer For 690-960MHz / 1710-3700MHz

MECSINE 兆讯

Multilayer Diplexer

For 690-960MHz / 1710-2700MHz

MDPX06091727D21

2.0 x 1.25mm [EIA 0805]

All Use For RF & Microwave

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Feb. 03, 2024

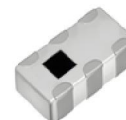
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APPLICATIONS

- 1, Low Insertion Loss
- 2, Small size in 0805
- 3, Excellent high-power capacity up to 2W
- 4, RoHS compliance (Pb-Free)



DESCRIPTION

The MDPX06091727D21 is a low-cost, high-performance band pass filter in an easy to use surface mount package. The MDPX06091727D21 is ideal for low insertion loss and wide band application. It is suitable used in smart phone, 5G module and other IOT modules. It is constructed from ceramic which possess excellent electrical and mechanical stability. All components are 100% RF tested.

MAXIMUM RATINGS

Characteristic	Ratings	Units
RF Power (in BW)	33	dBm
Operating Temperature Range	-40~+85	°C
Storage Temperature Range	-40~+85	°C
Moisture Sensitivity Levels	3	MSL
ESD Level Human Body Model	8000	V

ELECTRICAL CHARACTERISTICS

Low-Band

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion Loss (dB)	698 to 746	-	0.22	0.35
	746 to 960	-	0.19	0.35
Return Loss (dB)	698 to 746	10	15	-
	746 to 960	10	22	-
Attenuation (dB)	1710-2170	25	30	--
	2170 to 2400	30	35	-
	2400 to 2700	25	32	-
Characteristics Impedance (Ω)		50 (Nominal)		

- Ta: +25±5°C

High-Band

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion Loss (dB)	1710 to 2700	-	0.25	0.35
Return Loss (dB)	1710 to 2700	10	15	-
Attenuation (dB)	698 to 960	20	29	-
Characteristics Impedance (Ω)		50 (Nominal)		

- Ta: +25±5°C

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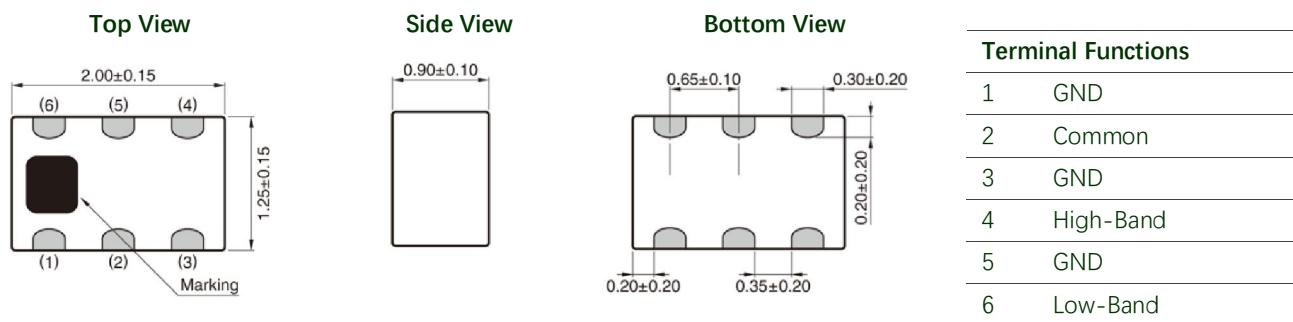
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Common

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Isolation (dB)	698 to 960	16	20	-
	1700 to 2700	10	13	-
Return Loss (dB)	698 to 960	10	18	-
	1700 to 2700	10	22	-
Characteristics Impedance (Ω)		50 (Nominal)		

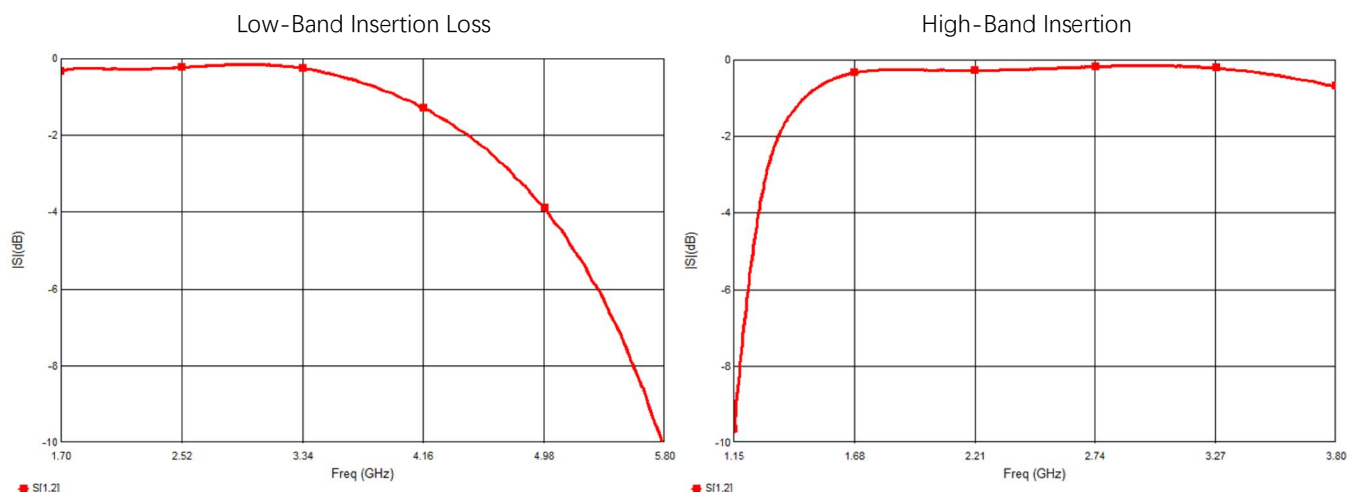
- Ta: +25±5°C

SHAPES AND DIMENSIONS



Unit: mm

FREQUENCY CHARACTERISTICS



Low-Band Return Loss

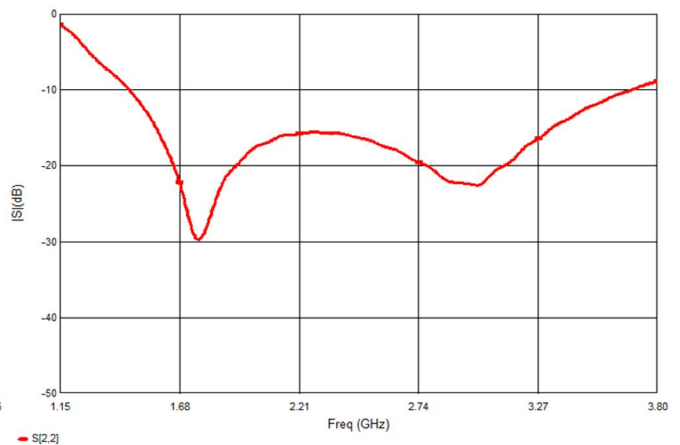
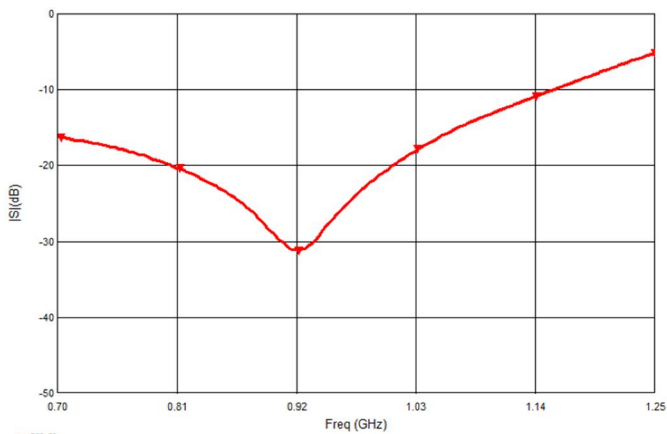
High-Band Return Loss

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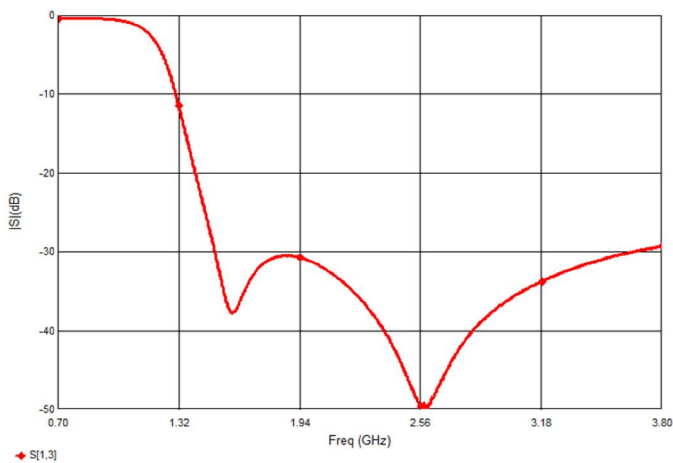
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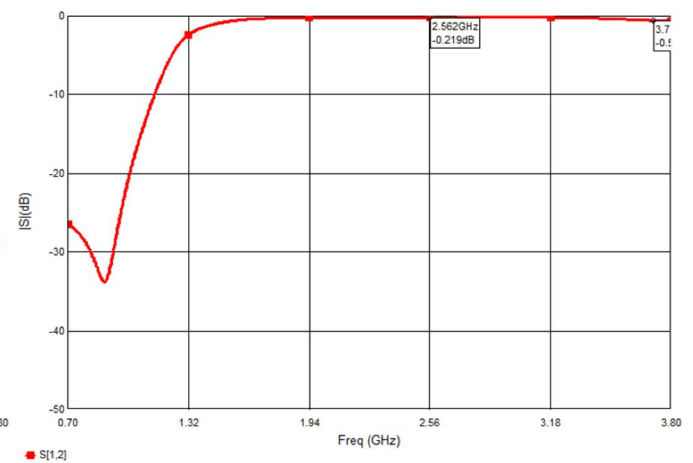
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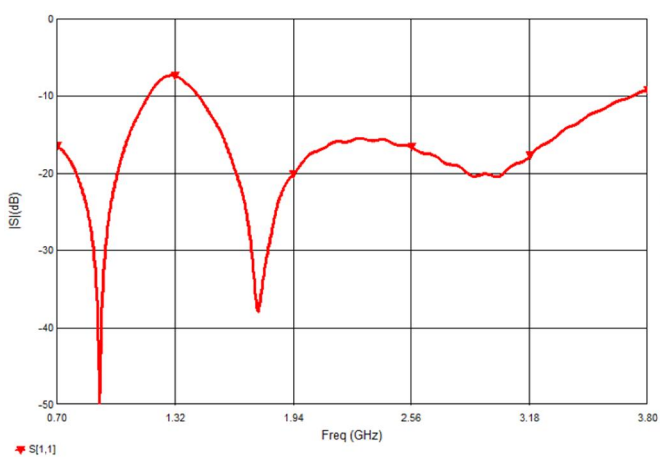
Low-Band Attenuation



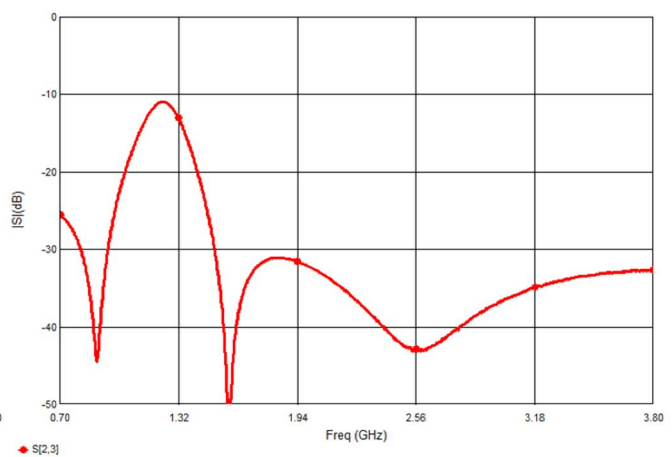
High-Band Attenuation



Common Return Loss



Common Isolation



RECOMMENDED LAND PATTERN AND EVALUATION BOARD

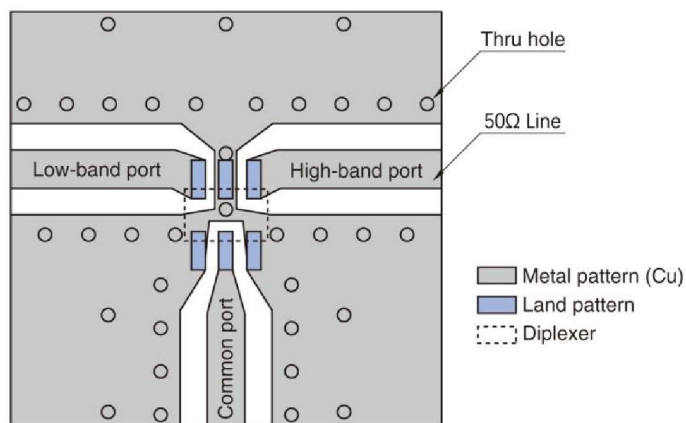
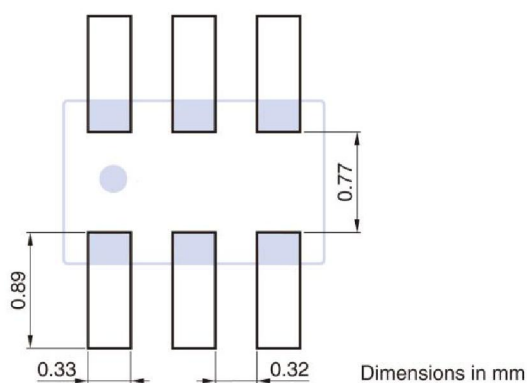
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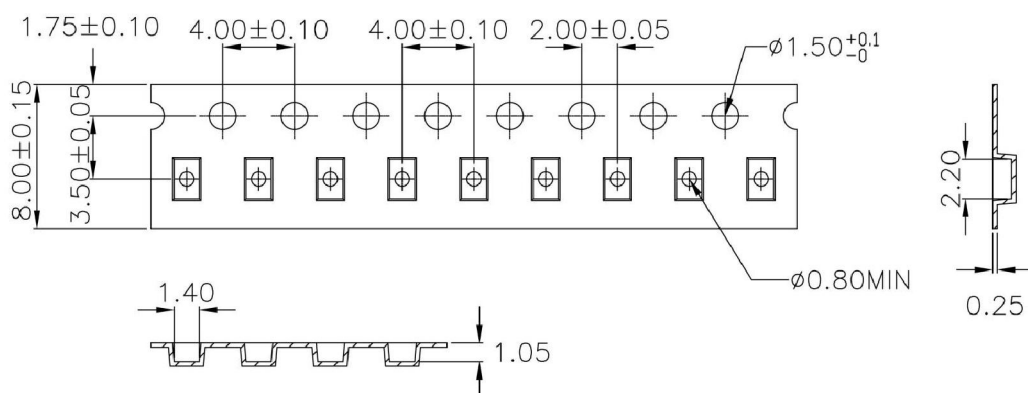
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PACKAGING AND ORDERING INFORMATION

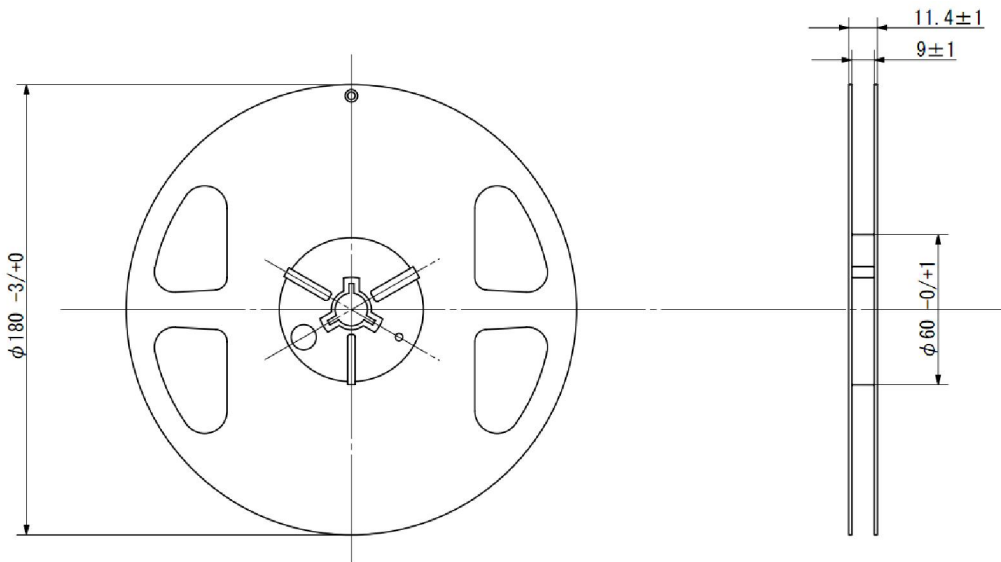


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Device	Package	Reel	Shipping
MDPX06091727D21	2.0*1.25mm	7"	3000 Reel

Revision	Description	Date
Rev0	Preliminary	2024/2/26

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