

DUAL BAND DIPLEXER

1. Characteristics (at -40 ~+85°C)

Part Number	LFD182G45MJ6D922
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<Low Band >

Pass Band Range	f1		2450.00 ± 50.00MHz
Insertion Loss(dB)	ANT-LB	in f1	0.60 max at 25°C 0.65 max at -40~ +85°C
Attenuation (dB)	ANT-LB	4800.00–4992.00	32.0 min.
		7200.00–7488.00	24.0 min.
VSWR	LB	in f1	1.80 max.
	ANT	in f1	1.80 max.

<High Band>

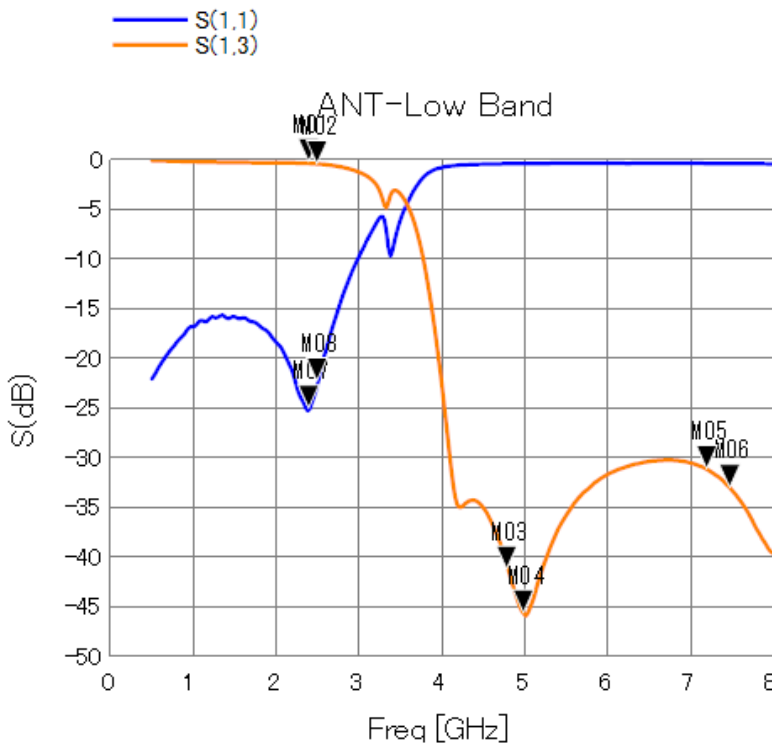
Pass Band Range	f2		5425.00 ± 525.00 MHz
Insertion Loss(dB)	ANT-HB	in f2	0.70 max at 25°C 0.80 max at -40~ +85°C
Attenuation (dB)	ANT-HB	30.00–2700.00	32.0 min.
		9800.00–11900.00	15.0 min.
		14700.00–17850.00	11.0 min.
VSWR	HB	in f2	1.80 max.
	ANT	in f2	1.80 max.

Isolation (dB)	LB-HB	30.00–2700.00	32.0 dB min.
		in f2	28.0 dB min.
Power Capacity			2 W max

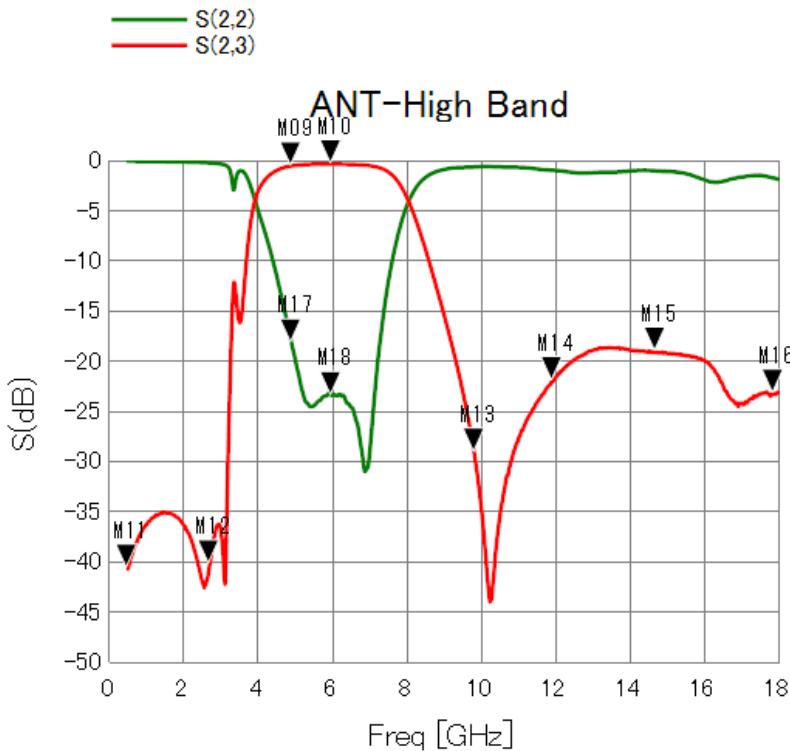
LB : Low Band Port

HB : High Band Port

ANT : Common Port

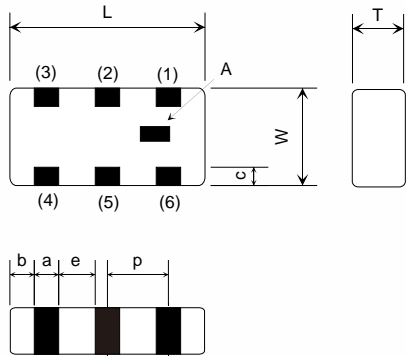


M01 : S(1,3) Freq 2.400G Hz S(dB) -0.404	M07 : S(1,1) Freq 2.400G Hz S(dB) -25.081
M02 : S(1,3) Freq 2.500G Hz S(dB) -0.454	M08 : S(1,1) Freq 2.500G Hz S(dB) -22.475
M03 : S(1,3) Freq 4.800G Hz S(dB) -41.295	
M04 : S(1,3) Freq 4.992G Hz S(dB) -45.728	
M05 : S(1,3) Freq 7.200G Hz S(dB) -31.180	
M06 : S(1,3) Freq 7.488G Hz S(dB) -33.187	



M09 : S(2,3) Freq 4.900G Hz S(dB) -0.516	M17 : S(2,2) Freq 4.900G Hz S(dB) -18.257
M10 : S(2,3) Freq 5.950G Hz S(dB) -0.341	M18 : S(2,2) Freq 5.950G Hz S(dB) -23.342
M11 : S(2,3) Freq 500.000M Hz S(dB) -40.692	
M12 : S(2,3) Freq 2.700G Hz S(dB) -40.230	
M13 : S(2,3) Freq 9.800G Hz S(dB) -29.083	
M14 : S(2,3) Freq 11.900G Hz S(dB) -22.034	
M15 : S(2,3) Freq 14.700G Hz S(dB) -19.095	
M16 : S(2,3) Freq 17.850G Hz S(dB) -23.214	

2. Construction, Dimensions & Marking



Mark	Meaning
A	Directional Input Mark

(in mm)

Mark	Dimension	Mark	Dimension	Mark	Dimension
L	1.6 ± 0.1	a	0.2 ± 0.1	e	0.3 ± 0.1
W	0.8 ± 0.1	b	0.20 ± 0.15	p	0.50 ± 0.05
T	0.7 max.	c	0.15 ± 0.10	-	-

TERMINAL CONFIGURATION

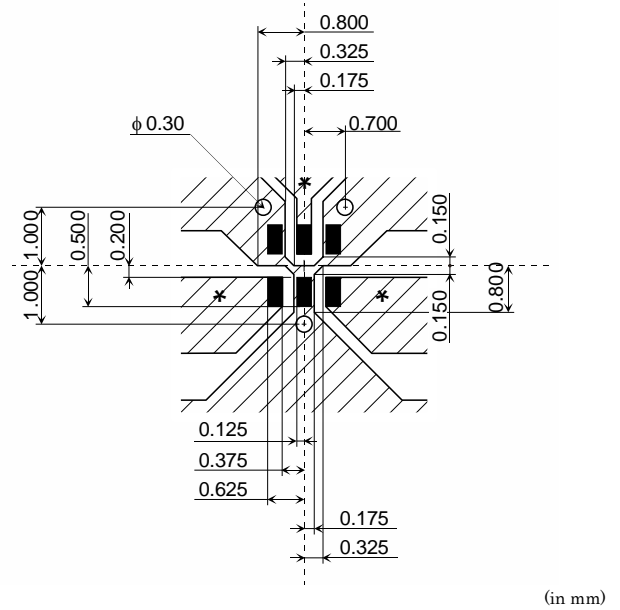
Terminal No.	Terminal Name	Terminal No.	Terminal Name
(1)	GND	(4)	P1
(2)	P3	(5)	GND
(3)	GND	(6)	P2

P1 : Lower Frequency Port

P2 : Higher Frequency Port

P3 : Common Port

3. Land Pattern



- Land
- Solder resist
- No pattern Solder resist
- Through Hole ϕ 0.30

*Line width to be designed to match 50 Ω characteristic impedance, depending on PCB material and thickness.

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- Medical equipment.
- Traffic signal equipment.
- Burning / explosion control equipment
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