

DUAL BAND DIPLEXER

1. Characteristics (at -40 to +85 °C)

Part Number	LFD182G45DCJD949
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<Low Band >

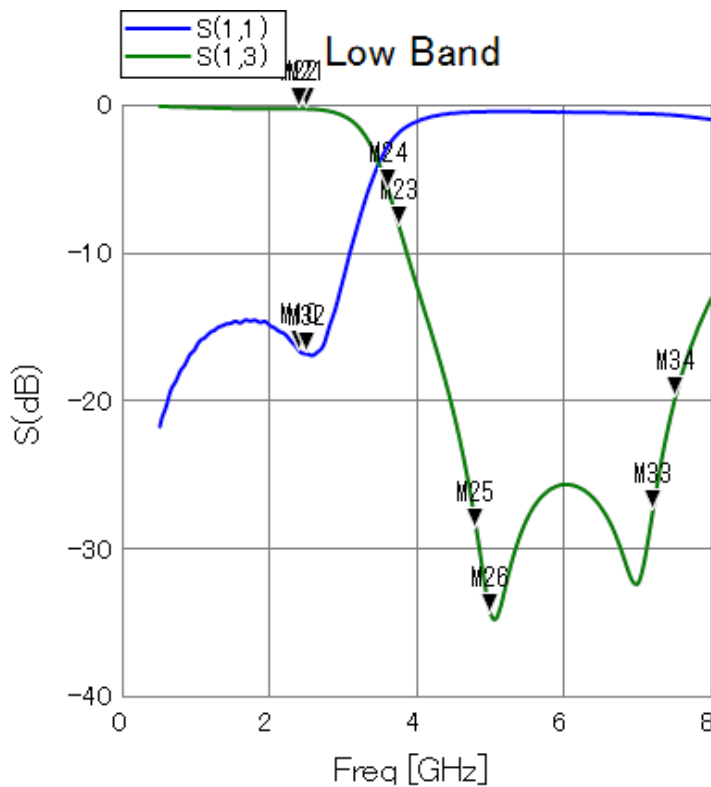
Pass Band Range	f1		2400.00 ~ 2500.00MHz
Insertion Loss(dB)	ANT-LB	in f1	0.40 max at 25°C 0.50 max at -40~ +85°C
Attenuation (dB)	ANT-LB	3600.00~3750.00 MHz	2.5 min
		4800.00~5000.00 MHz	20.0 min
		7200.00~7500.00 MHz	10.0 min
VSWR	LB	in f1	1.50 max
	ANT	in f1	1.50 max

<High Band>

Pass Band Range	f2		4900.00 ~ 5950.00MHz
Insertion Loss(dB)	ANT-HB	in f2	0.50 max at 25°C 0.60 max at -40~ +85°C
Attenuation (dB)	ANT-HB	860.00~960.00 MHz	27.0 min
		1545.00~1605.00 MHz	25.0 min
		1710.00~1990.00 MHz	25.0 min
		2170.00 MHz	30.0 min
		8100.00~8800.00 MHz	8.0 min
		8820.00~9800.00 MHz	15.0 min
		9800.00~11800.00 MHz	25.0 min
VSWR	HB	in f2	1.50 max
	ANT	in f2	1.50 max

Power Capacity	3 W max
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LB: Low Band Port
 HB: High Band Port
 ANT: Common Port



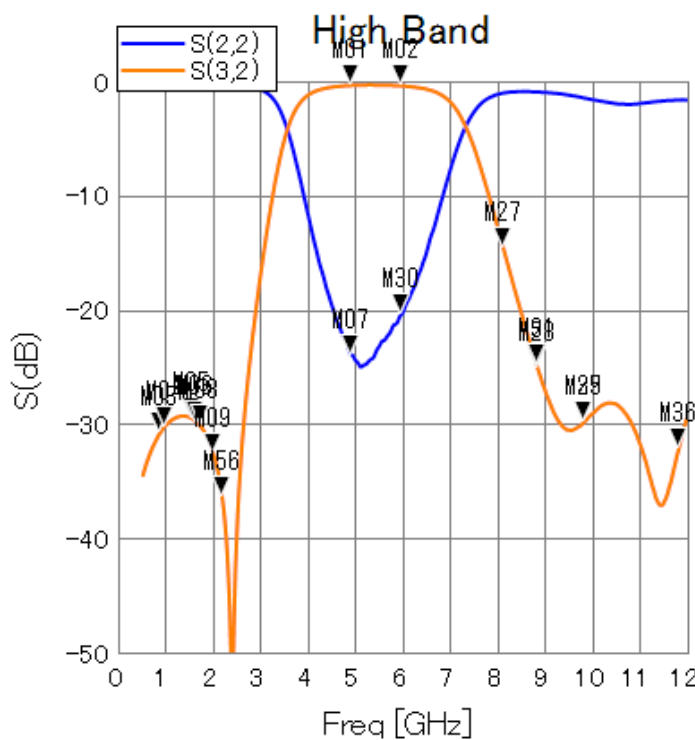
M22 : S(1,3) Freq 2.400G Hz S(dB) -0.205	M21 : S(1,3) Freq 2.500G Hz S(dB) -0.218
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M10 : S(1,1) Freq 2.400G Hz S(dB) -16.611	M32 : S(1,1) Freq 2.500G Hz S(dB) -16.796
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M24 : S(1,3) Freq 3.600G Hz S(dB) -5.664	M23 : S(1,3) Freq 3.750G Hz S(dB) -8.156
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M25 : S(1,3) Freq 4.800G Hz S(dB) -28.637	M26 : S(1,3) Freq 5.000G Hz S(dB) -34.417
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M33 : S(1,3) Freq 7.200G Hz S(dB) -27.382	M34 : S(1,3) Freq 7.500G Hz S(dB) -19.807
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M01 : S(3,2) Freq 4.900G Hz S(dB) -0.269	M02 : S(3,2) Freq 5.950G Hz S(dB) -0.311
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M07 : S(2,2) Freq 4.900G Hz S(dB) -23.826	M30 : S(2,2) Freq 5.950G Hz S(dB) -20.315
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M03 : S(3,2) Freq 860.000M Hz S(dB) -30.699	M04 : S(3,2) Freq 960.000M Hz S(dB) -30.123
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M05 : S(3,2) Freq 1.545G Hz S(dB) -29.446	M06 : S(3,2) Freq 1.605G Hz S(dB) -29.640
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M08 : S(3,2) Freq 1.710G Hz S(dB) -30.084	M09 : S(3,2) Freq 1.990G Hz S(dB) -32.548
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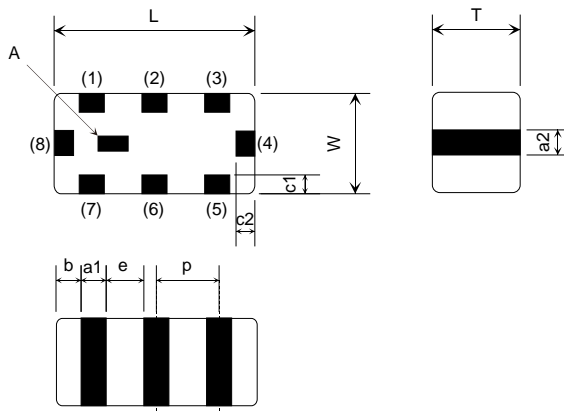
M56 : S(3,2) Freq 2.170G Hz S(dB) -36.302

M27 : S(3,2) Freq 8.100G Hz S(dB) -14.559	M31 : S(3,2) Freq 8.800G Hz S(dB) -24.749
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M28 : S(3,2) Freq 8.820G Hz S(dB) -25.021	M29 : S(3,2) Freq 9.800G Hz S(dB) -29.728
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M35 : S(3,2) Freq 9.800G Hz S(dB) -29.728	M36 : S(3,2) Freq 11.800G Hz S(dB) -32.009
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2. Construction, Dimensions & Marking



Mark	Meaning
A	Directional Input Mark

(in mm)

Mark	Dimension	Mark	Dimension	Mark	Dimension
L	1.6 ± 0.1	a2	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.	c1	0.15 ± 0.10	-	-
a1	0.2 ± 0.1	c2	0.15 ± 0.10	-	-

TERMINAL CONFIGURATION

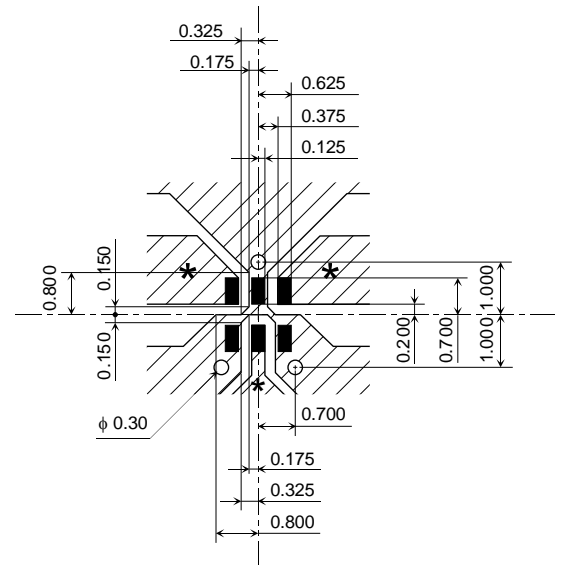
Terminal No.	Terminal Name	Terminal No.	Terminal Name
(1)	GND	(5)	P2(*2)
(2)	P3(*3)	(6)	GND
(3)	GND	(7)	P1(*1)
(4)	NC	(8)	NC

'NC' terminal should not be fixed to any pattern.

It's unnecessary to make land pattern for pin 4 and 8.

- (*1) Lower Frequency Port
- (*2) Higher Frequency Port
- (*3) Common Port

3. Land Pattern



(in mm)

- 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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