

DUAL Band Diplexer

1. Characteristics (at -40 to +85 °C)

Part Number		LFD18829MMP1E441	
<Low Band >			
Pass Band Range	f1		699.00 ~ 960.00MHz
Insertion Loss(dB)	ANT-LB	in f1	0.65 max at 25°C 0.75 max at -40~ +85°C
		699.00 ~ 716.00MHz	0.49 max at 25°C 0.59 max at -40~ +85°C
		729.00 ~ 746.00MHz	0.51 max at 25°C 0.61 max at -40~ +85°C
		746.00 ~ 756.00MHz	0.51 max at 25°C 0.61 max at -40~ +85°C
		777.00 ~ 787.00MHz	0.53 max at 25°C 0.63 max at -40~ +85°C
		791.00 ~ 821.00MHz	0.55 max at 25°C 0.65 max at -40~ +85°C
		815.00 ~ 849.00MHz	0.56 max at 25°C 0.66 max at -40~ +85°C
		832.00 ~ 862.00MHz	0.57 max at 25°C 0.67 max at -40~ +85°C
		860.00 ~ 894.00MHz	0.59 max at 25°C 0.69 max at -40~ +85°C
		880.00 ~ 915.00MHz	0.60 max at 25°C 0.70 max at -40~ +85°C
		925.00 ~ 960.00MHz	0.65 max at 25°C 0.75 max at -40~ +85°C
Attenuation (dB)	ANT-LB	1710.00 ~ 2690.00 MHz	22.5 min
		1406.00 ~ 1496.00 MHz	2.5 min
		1408.00 ~ 1432.00 MHz	2.0 min
		1554.00 ~ 1574.00 MHz	11.5 min
		1664.00 ~ 1724.00 MHz	20.5 min
		1648.00 ~ 1698.00 MHz	20.5 min
		1760.00 ~ 1830.00 MHz	24.5 min
		2109.00 ~ 2244.00 MHz	30.5 min
		2110.00 ~ 2170.00 MHz	34.5 min
		2331.00 ~ 2361.00 MHz	29.5 min
		2496.00 ~ 2586.00 MHz	26.5 min
		2472.00 ~ 2547.00 MHz	26.5 min
		2640.00 ~ 2745.00 MHz	24.5 min
		3400.00 ~ 3600.00 MHz	20.5 min
4905.00 ~ 5845.00 MHz	20.5 min		
5150.00 ~ 5850.00 MHz	20.5min		
6000.00 ~ 6500.00 MHz	29.5 min		
VSWR	LB	in f1	1.54 max
	ANT	in f1	1.54 max

<High Band>

Pass Band Range	f2		1710.00 ~ 2690.00MHz
Insertion Loss(dB)	ANT-HB	in f2	0.70 max at 25°C 0.80 max at -40~ +85°C
		1710.00 ~ 1785.00MHz	0.70 max at 25°C 0.80 max at -40~ +85°C
		1805.00 ~ 1880.00MHz	0.60 max at 25°C 0.70 max at -40~ +85°C
		1880.00 ~ 1920.00MHz	0.57 max at 25°C 0.67 max at -40~ +85°C
		1930.00 ~ 1995.00MHz	0.55 max at 25°C 0.65 max at -40~ +85°C
		2010.00 ~ 2025.00MHz	0.53 max at 25°C 0.63 max at -40~ +85°C
		2110.00 ~ 2200.00MHz	0.51 max at 25°C 0.61 max at -40~ +85°C
		2300.00 ~ 2400.00MHz	0.50 max at 25°C 0.60 max at -40~ +85°C
		2500.00 ~ 2690.00MHz	0.50 max at 25°C 0.60 max at -40~ +85°C
Attenuation (dB)	ANT-HB	699.00 ~ 915.00 MHz	21.5 min
		915.00 ~ 960.00 MHz	22.5 min
		4905.00 ~ 5845.00 MHz	10.5 min
		5150.00 ~ 5850.00 MHz	11.5 min
		5550.00 ~ 5745.00 MHz	11.5 min
		5640.00 ~ 5760.00 MHz	11.5 min
		5760.00 ~ 5940.00 MHz	11.5 min
		6030.00 ~ 6075.00 MHz	11.5 min
		6000.00 ~ 6500.00 MHz	9.5 min

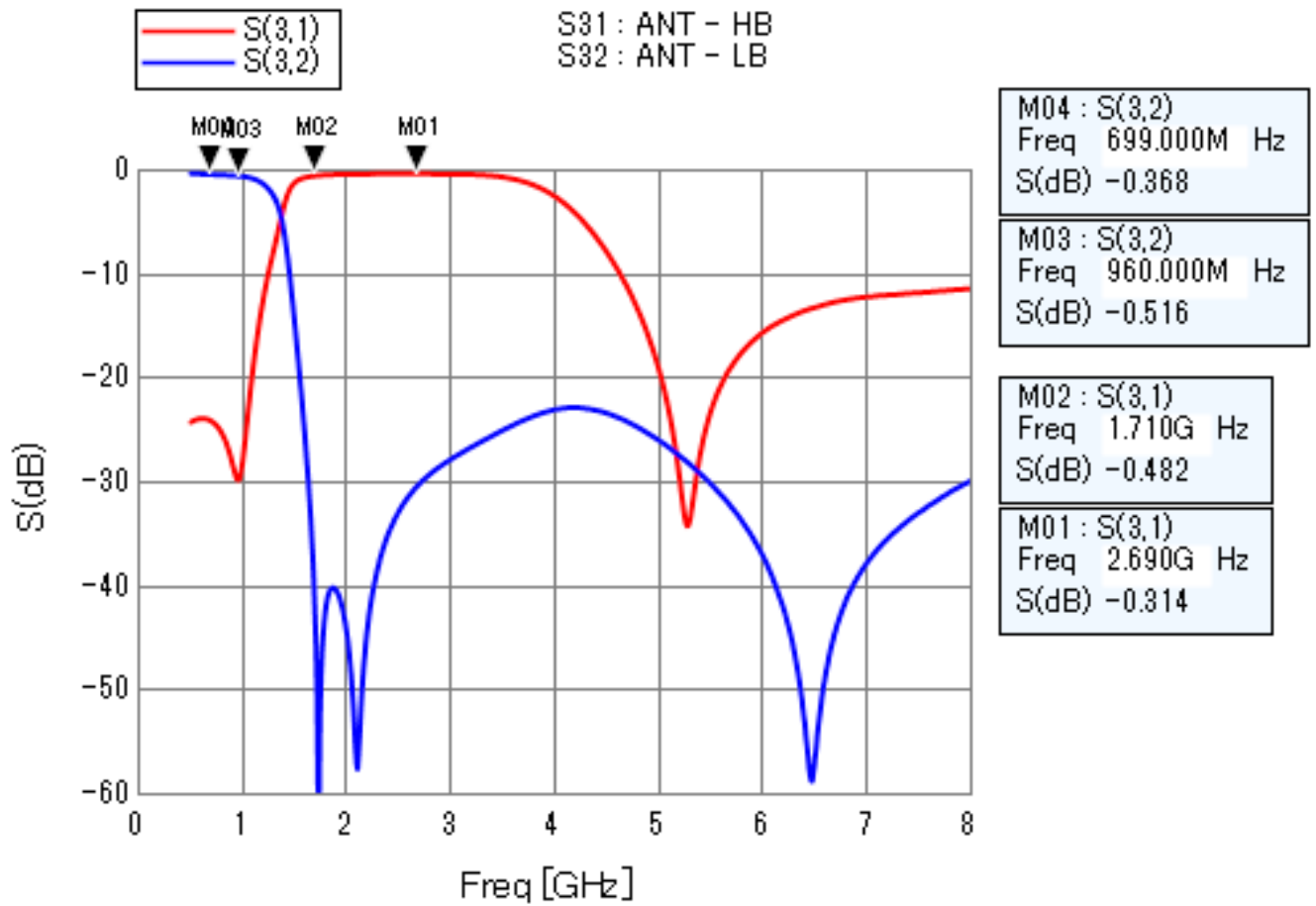
VSWR	HB	in f2	1.74 max
	ANT	in f2	1.74 max

Isolation (dB)	LB-HB	699.00 ~ 915.00 MHz	21.5 min
		915.00 ~ 960.00 MHz	23.5 min
		in f2	25.0 min
		2110.00 ~ 2170.00 MHz	34.0 min
		2112.00 ~ 2148.00 MHz	34.0 min
Power Capacity			3.0 W max (at 50% duty)

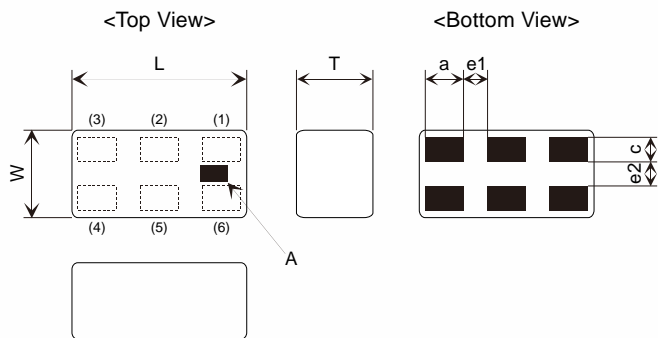
LB: Low Band Port

HB: High Band Port

ANT: Common Port



2. Construction,Dimensions&Marking



Mark	Meaning
A	Directional Input Mark

(in mm)

Mark	Dimension	Mark	Dimension	Mark	Dimension
L	1.6 ± 0.1	a	0.35 ± 0.05	e1	0.22 ± 0.05
W	0.8 ± 0.1	c	0.225 ± 0.05	e2	0.22 ± 0.05
T	0.7 max	-	-	-	-

TERMINAL CONFIGURATION

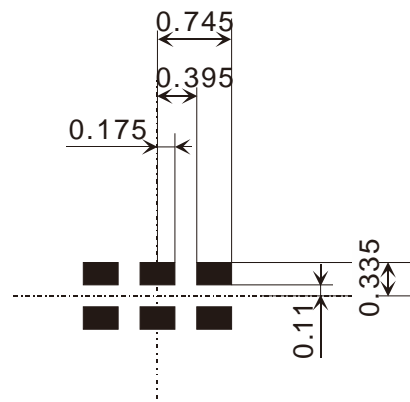
Terminal No.	Terminal Name	Terminal No.	Terminal Name
(1)	GND	(4)	P1
(2)	P3	(5)	GND
(3)	GND	(6)	P2

P1:High Band Port

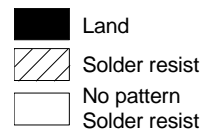
P2:Low Band Port

P3:Common Port

3. Land Pattern



(in mm)



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

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