

DUAL Band Diplexer

1. Characteristics (at -40 to +85 °C)

Pass Band Range f1	Part Number LFD18829MMP1E441					
in f1	<low band=""></low>					
In 11	Pass Band Range		699.00 ~ 960.00MHz			
ANT-LB 699.00 ~ 716.00MHz 0.59 max at -40~ +85°C 729.00 ~ 746.00MHz 0.61 max at -25°C 0.61 max at -25°C 0.61 max at -25°C 0.61 max at -40~ +85°C 0.61 max at -40~ +85°C 0.61 max at -40~ +85°C 0.63 max at -40~ +85°C 0.65 max at -40~ +85°C 0.65 max at -40~ +85°C 0.65 max at -40~ +85°C 0.66 max at -40~ +85°C 0.66 max at -40~ +85°C 0.66 max at -40~ +85°C 0.67 max at -25°C 0.67 max at -40~ +85°C 0.69 max at -40~ +85°C 0.69 max at -40~ +85°C 0.69 max at -40~ +85°C 0.60 max at -40~ +85°C 0.65 max at -			in f1			
Name			699.00 ~ 716.00MHz	0.59 max at -40~ +85°C		
Insertion Loss(dB) ANT-LB AN			729.00 ~ 746.00MHz	0.61 max at -40~ +85°C		
Insertion Loss(dB) ANT-LB AN			746.00 ~ 756.00MHz	0.61 max at -40~ +85°C		
ANT-LB ANT-LB			777.00 ~ 787.00MHz	0.63 max at -40~ +85°C		
## Attenuation (dB) ## ANT-LB #	Insertion Loss(dB)	ANT-LB	791.00 ~ 821.00MHz	0.65 max at -40~ +85°C		
832.00 ~ 862.00MHz			815.00 ~ 849.00MHz	0.66 max at -40~ +85°C		
Attenuation (dB) ANT-LB ANT-			832.00 ~ 862.00MHz	0.67 max at -40~ +85°C		
S80.00 ~ 915.00MHz			860.00 ~ 894.00MHz	0.69 max at -40~ +85°C		
Attenuation (dB) ANT-LB ANT-			880.00 ~ 915.00MHz	0.70 max at -40~ +85°C		
Attenuation (dB) ANT-LB ANT-			925.00 ~ 960.00MHz			
Attenuation (dB) ANT-LB ANT-		ANT-LB	1710.00 ~ 2690.00 MHz	22.5 min		
Attenuation (dB) ANT-LB ANT-			1406.00 ~ 1496.00 MHz	2.5 min		
Attenuation (dB) ANT-LB ANT-			1408.00 ~ 1432.00 MHz	2.0 min		
Attenuation (dB) ANT-LB ANT-			1554.00 ~ 1574.00 MHz	11.5 min		
Attenuation (dB) ANT-LB ANT-			1664.00 ~ 1724.00 MHz	20.5 min		
Attenuation (dB) ANT-LB ANT-LB 2109.00 ~ 2244.00 MHz 2110.00 ~ 2170.00 MHz 2331.00 ~ 2361.00 MHz 2496.00 ~ 2586.00 MHz 2472.00 ~ 2547.00 MHz 2640.00 ~ 2745.00 MHz 24.5 min 3400.00 ~ 3600.00 MHz 4905.00 ~ 5845.00 MHz 20.5 min 5150.00 ~ 5850.00 MHz 20.5 min 5150.00 ~ 6500.00 MHz 29.5 min 154 max			1648.00 ~ 1698.00 MHz	20.5 min		
Attenuation (dB) ANT-LB 2110.00 ~ 2170.00 MHz 2331.00 ~ 2361.00 MHz 2496.00 ~ 2586.00 MHz 2472.00 ~ 2547.00 MHz 26.5 min 2640.00 ~ 2745.00 MHz 24.5 min 3400.00 ~ 3600.00 MHz 4905.00 ~ 5845.00 MHz 5150.00 ~ 5850.00 MHz 20.5 min 5150.00 ~ 6500.00 MHz 29.5 min 1 54 max			1760.00 ~ 1830.00 MHz	24.5 min		
2331.00 ~ 2361.00 MHz			2109.00 ~ 2244.00 MHz	30.5 min		
2496.00 ~ 2586.00 MHz	Attenuation (dB)		2110.00 ~ 2170.00 MHz	34.5 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 20.5 min 6000.00 ~ 6500.00 MHz 29.5 min			2331.00 ~ 2361.00 MHz	29.5 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 20.5 min 6000.00 ~ 6500.00 MHz 29.5 min			2496.00 ~ 2586.00 MHz	26.5 min		
3400.00 ~ 3600.00 MHz 20.5 min 4905.00 ~ 5845.00 MHz 20.5 min 5150.00 ~ 5850.00 MHz 20.5 min 6000.00 ~ 6500.00 MHz 29.5 min			2472.00 ~ 2547.00 MHz	26.5 min		
3400.00 ~ 3600.00 MHz 20.5 min 4905.00 ~ 5845.00 MHz 20.5 min 5150.00 ~ 5850.00 MHz 20.5 min 6000.00 ~ 6500.00 MHz 29.5 min			2640.00 ~ 2745.00 MHz	24.5 min		
4905.00 ~ 5845.00 MHz 20.5 min 5150.00 ~ 5850.00 MHz 20.5min 6000.00 ~ 6500.00 MHz 29.5 min						
5150.00 ~ 5850.00 MHz 20.5min 6000.00 ~ 6500.00 MHz 29.5 min						
6000.00 ~ 6500.00 MHz 29.5 min			-			
LB in f1 1.54 max						
LVSWB	1,011,15	LB				
ANT in f1 1.54 max	VSWR					

All the technical data and information contained herein are subject to change without prior notice.



<High Band>

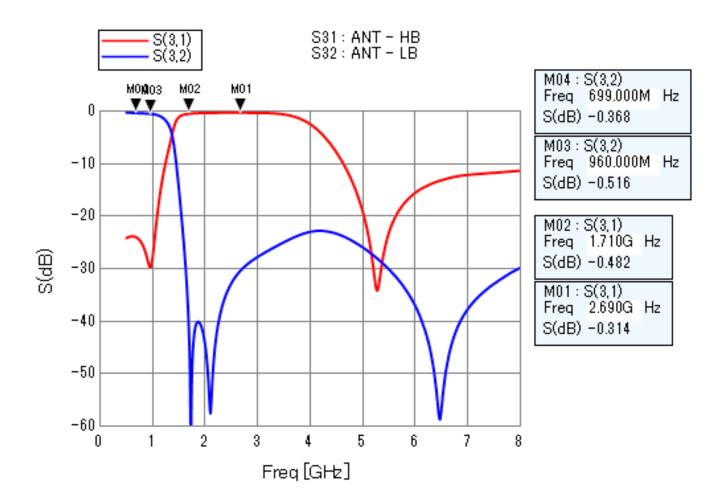
Pass Band Range		f2	1710.00 ~ 2690.00MHz
		in f2	0.70 max at 25°C
		11112	0.80 max at -40~ +85°C
		1710.00 ~ 1785.00MHz	0.70 max at 25°C
		17 10.00 17 00.001/11/2	0.80 max at -40~ +85°C
		1805.00 ~ 1880.00MHz	0.60 max at 25°C
		1000.00 1000.0011112	0.70 max at -40~ +85°C
		1880.00 ~ 1920.00MHz	0.57 max at 25°C
		1000100 1020100111112	0.67 max at -40~ +85°C
Insertion Loss(dB)	ANT-HB	1930.00 ~ 1995.00MHz	0.55 max at 25°C
	7		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
		000 00 045 00 MH-	0.60 max at -40~ +85°C
	ANT-HB	699.00 ~ 915.00 MHz	21.5 min
Attenuation (dB)		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	
		699.00 ~ 915.00 MHz	21.5 min	

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

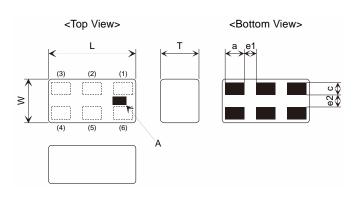




(in mm)



2. Construction, Dimensions & Marking



Mark	Meaning
A	Directional Input Mark

(in mm)

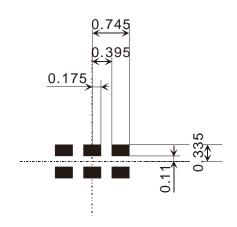
Mark	Dimension	Mark	Dimension	Mark	Dimension
L	1.6 ± 0.1	a	0.35 ± 0.05	e1	0.22 ± 0.05
W	0.8 ± 0.1	c	0.225 ± 0.05	e2	0.22 ± 0.05
T	0.7 max	-	-	i	-

TERMINAL CONFIGURATION

Terminal No.	nal No. Terminal Name Terminal No.		Terminal Name
(1)	GND	(4)	P1
(2)	Р3	(5)	GND
(3)	GND	(6)	P2

P1:High Band Port P2:Low Band Port P3:Common Port

3. Land Pattern





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





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