Chip Multilayer Diplexer

1. Characteristics (-40°C ~ +85°C)

Part Number			LFD182G45MPEE476

<Low Band >

Pass Band Range	f1		2400.00 ~ 2500.00 MHz
Insertion Loss(dB)	ANT-LB	2400.00~2500.00 MHz	0.55 max. at 25 °C 0.65 max. at -40 °C ~ +85 °C
Attenuation (dB)	ANT-LB	4800.00~5000.00 MHz	27.0 min.
		7200.00 ~ 7500.00 MHz	15.0 min.
Return Loss (dB)	LB	in f1	10.0 min.
	ANT	in f1	10.0 min.

<High Band>

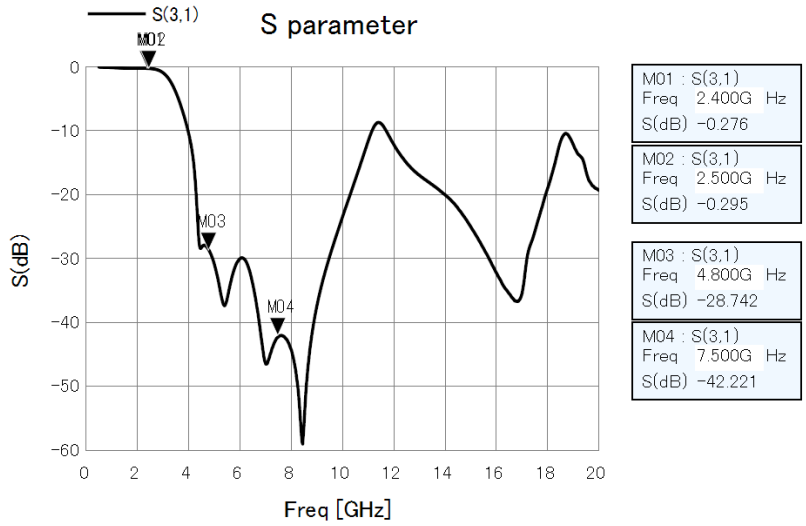
Pass Band Range	f2		4900.00 ~ 5950.00 MHz
Insertion Loss(dB)	ANT-HB	4900.00~5950.00 MHz	1.60 max. at 25 °C 1.80 max. at -40 °C ~ +85 °C
Attenuation (dB)	ANT-HB	2400.00 ~ 2500.00 MHz	36.0 min.
		3400.00 ~ 3600.00 MHz	14.0 min.
		3600.00 ~ 3800.00 MHz	14.0 min.
		6900.00 ~ 7200.00 MHz	7.0 min.
		7200.00 ~ 7800.00 MHz	11.0 min.
		10300.0 ~ 11700.0 MHz	25.0 min.
		15300.0 ~ 16200.0 MHz	15.0 min.
Return Loss (dB)	HB	in f2	10.0 min.
		in f3	10.0 min.
	ANT	in f2	10.0 min.
		in f3	10.0 min.

<Isolation>

Isolation (dB)	LB-HB	in f1	37.0 min.
		4800.00 ~ 5000.00 MHz	29.0 min.
Power Capacity			2W max

LB: Low Band Port
HB: High Band Port
ANT: Common Port

Insertion Loss (Low Band)



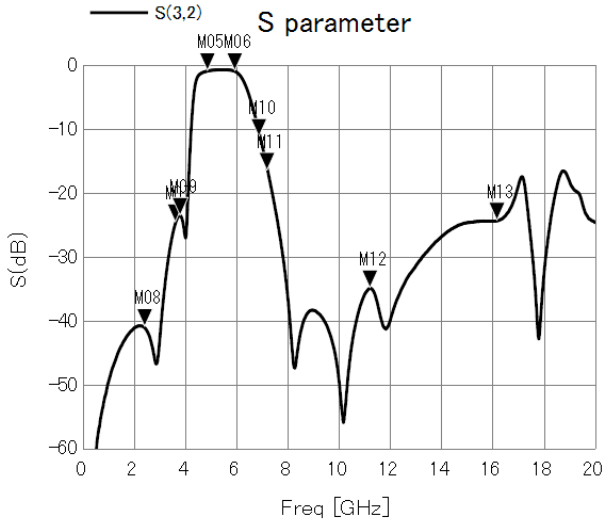
M01 : S(3,1)
Freq 2.400G Hz
S(dB) -0.276

M02 : S(3,1)
Freq 2.500G Hz
S(dB) -0.295

M03 : S(3,1)
Freq 4.800G Hz
S(dB) -28.742

M04 : S(3,1)
Freq 7.500G Hz
S(dB) -42.221

Insertion Loss (High Band)



M05 : S(3,2)
Freq 4.900G Hz
S(dB) -0.808

M06 : S(3,2)
Freq 5.950G Hz
S(dB) -0.980

M10 : S(3,2)
Freq 6.900G Hz
S(dB) -11.159

M08 : S(3,2)
Freq 2.400G Hz
S(dB) -41.068

M11 : S(3,2)
Freq 7.200G Hz
S(dB) -16.580

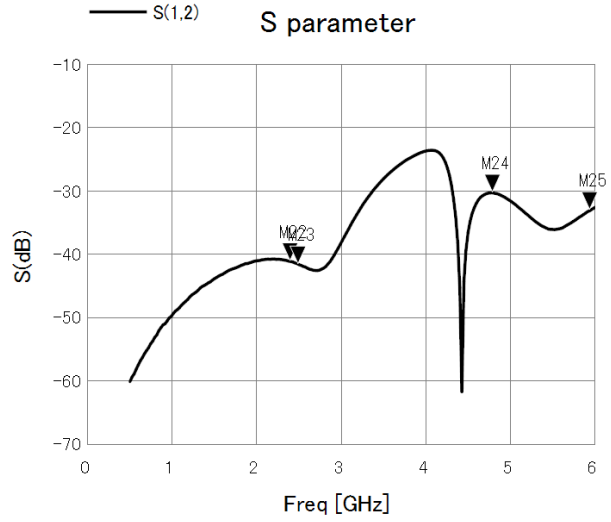
M07 : S(3,2)
Freq 3.600G Hz
S(dB) -24.526

M12 : S(3,2)
Freq 11.225G Hz
S(dB) -34.837

M09 : S(3,2)
Freq 3.800G Hz
S(dB) -23.566

M13 : S(3,2)
Freq 16.200G Hz
S(dB) -24.225

Isolation (Low-High)



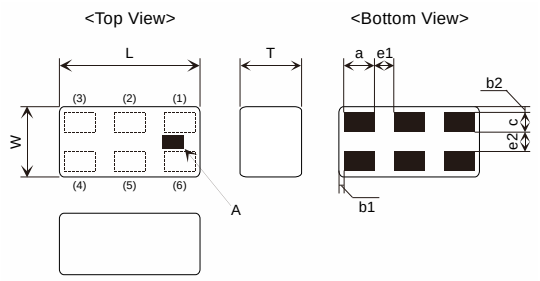
M22 : S(1,2)
Freq 2.400G Hz
S(dB) -41.125

M23 : S(1,2)
Freq 2.500G Hz
S(dB) -41.623

M24 : S(1,2)
Freq 4.800G Hz
S(dB) -30.325

M25 : S(1,2)
Freq 5.950G Hz
S(dB) -32.989

2. Construction,Dimensions&Marking



Mark	Meaning
A	Directional Input Mark

(in mm)

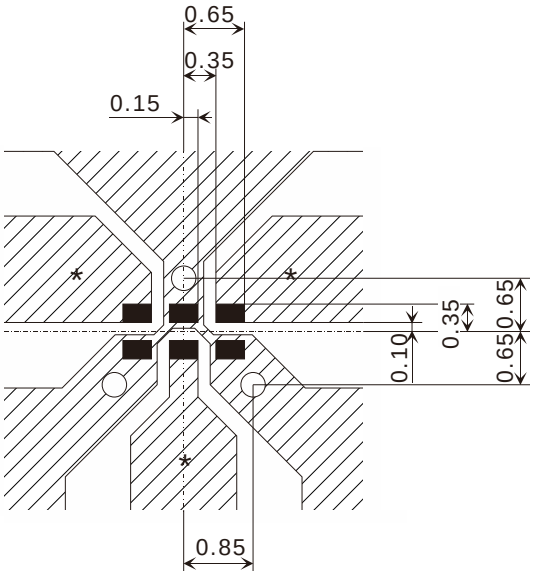
Mark	Dimension	Mark	Dimension	Mark	Dimension
L	1.6 ± 0.1	a	0.30 ± 0.05	b2	0.05 ± 0.05
W	0.8 ± 0.1	c	0.25 ± 0.05	e1	0.20 ± 0.05
T	0.6 max.	b1	0.15 ± 0.05	e2	0.20 ± 0.05

TERMINAL CONFIGURATION

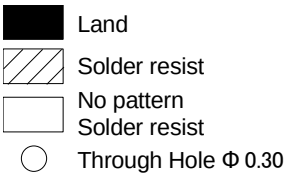
Terminal No.	Terminal Name	Terminal No.	Terminal Name
(1)	GND	(4)	P1
(2)	P3	(5)	GND
(3)	GND	(6)	P2

P1: Low Band Port
P2: High 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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