

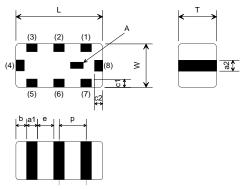
### **DUAL BAND DIPLEXER**

## 1. Characteristics (at -40°C to +85°C)

Part Number		LFD182G45DCHD481		
Pass Band Range	f1		5425.00 ± 525.00 MHz	
		f2	2450.00 ± 50.00 MHz	
Insertion Loss	P1-P3	in f1	1.00 max at 25°C 1.10 max (at -40 to +85 °C)	
Insertion Loss	P2-P3	in f2	0.40 max at 25°C 0.50 dB max (at -40 to +85 °C)	
Attenuation	P1-P3	at 2400.00~2500.00 MHz	23.0 min.	
		at 7200.00~7500.00 MHz	9.0 min.	
		at 9800.00~11900.00 MHz	13.0 min.	
	P2-P3	at 4800.00~5000.00 MHz	19.0 min.	
		at 7200.00~7500.00 MHz	17.0 min.	
V.S.W.R.	P1	in f1	1.80 max.	
	P2	in f2	1.50 max.	
	P3	in f1 / f2	1.80 max. / 1.50 max.	
Power Capacity		1 W max.		

## 2. Construction, Dimensions & Marking

# 3. Land Pattern



Mark	Meaning			
A	Directional Input Mark			

(in mm)

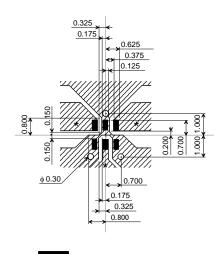
Mark	Dimension	Mark	Dimension	Mark	Dimension
L	$1.6 \pm 0.1$	a2	$0.2 \pm 0.1$	e	$0.3 \pm 0.1$
W	$0.8 \pm 0.1$	b	$0.20\pm0.15$	p	$0.50\pm0.05$
T	0.7 Max.	c1	$0.15 \pm 0.10$	-	-
a 1	$0.2 \pm 0.1$	c2	$0.15 \pm 0.10$	-	-

#### TERMINAL CONFIGURATION

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

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

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





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





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- Undersea equipment. - Power plant control equipment

- Medical equipment. - Transportation equipment (vehicles, trains, ships, elevator, etc.).

- Traffic signal equipment. - Disaster prevention / crime prevention equipment.

- Burning / explosion control equipment

- Application of similar complexity and/ or reliability requirements to the applications listed in the above.

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