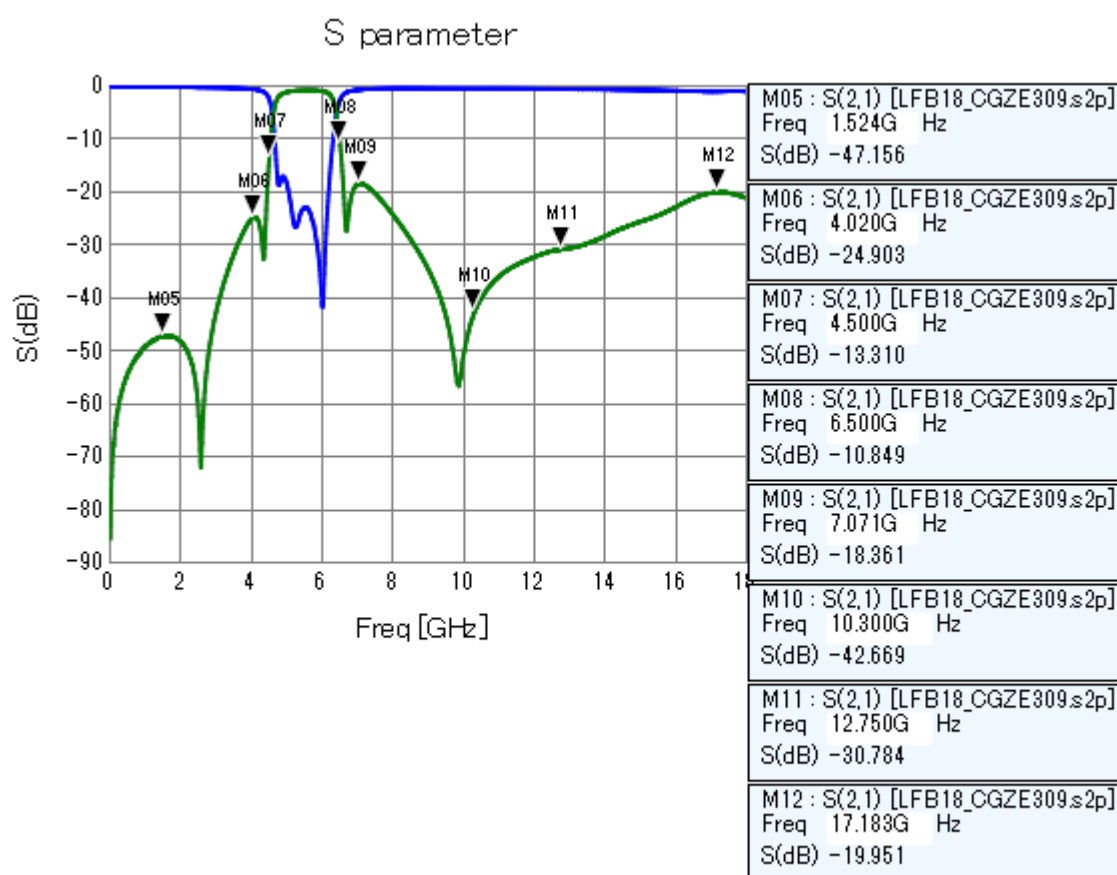
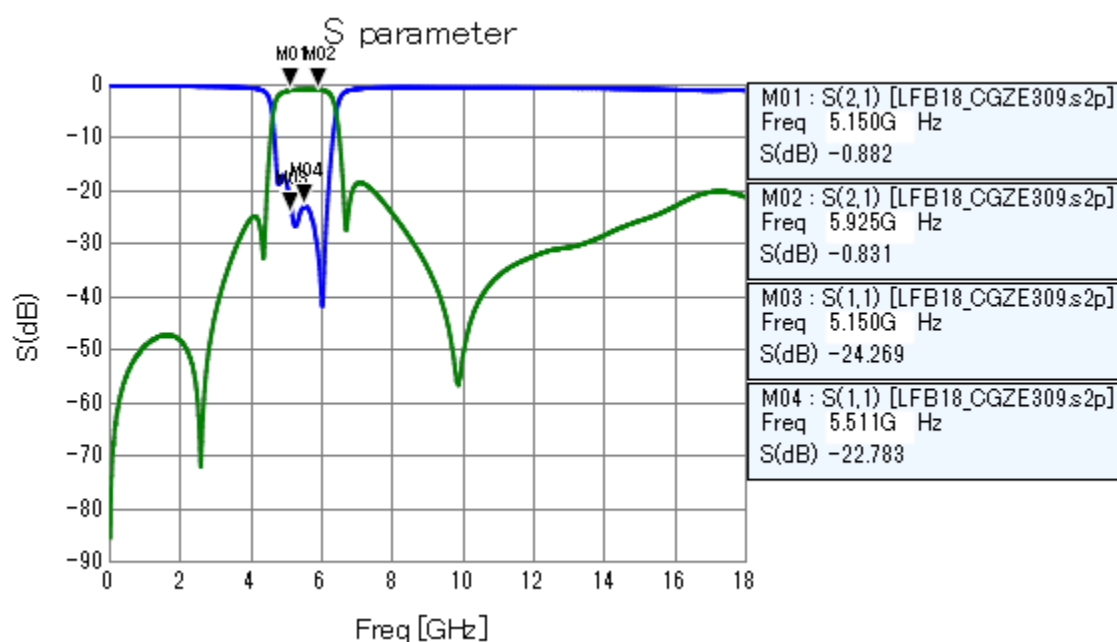


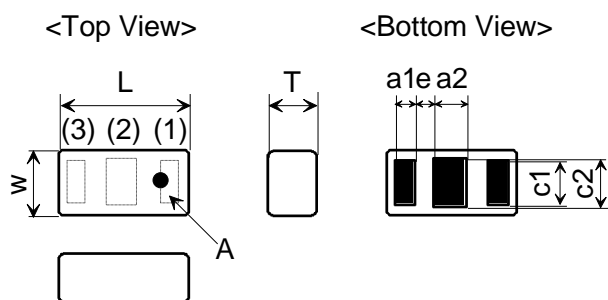
## BAND PASS FILTER

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

Murata Part Number	LFB185G53CGZE309	
Pass Band Range		5537.50 ± 387.50 MHz
Insertion Loss (dB)	5150.00 - 5850.00 MHz	1.0 max. at +25°C 1.2 max. at -40 ~+85°C
	5150.00 - 5925.00 MHz	1.0 max. at +25°C 1.2 max. at -40 ~+85°C
Attenuation (Absolute value) (dB)	10.00 - 2700.00 MHz	40 min.
	2700.00 - 3550.00 MHz	23 min.
	3550.00 - 4000.00 MHz	20 min.
	4000.00 - 4500.00 MHz	3 min.
	4400.00 MHz	10 min.
	6500.00 - 7000.00 MHz	3 min.
	7000.00 - 7400.00 MHz	11 min.
	7400.00 - 9750.00 MHz	13 min.
	9750.00 - 10300.00 MHz	30 min.
	10300.00 - 12750.00 MHz	27 min.
	15450.00 - 17775.00 MHz	15 min.
V.S.W.R. in BW	5150.00 - 5850.00 MHz	1.85 max.
	5150.00 - 5925.00 MHz	1.85 max.
Power Capacity (mW)	500 mW max.	



## 2. Construction, Dimensions & Marking



Mark	Meaning
A	Directional Input Mark

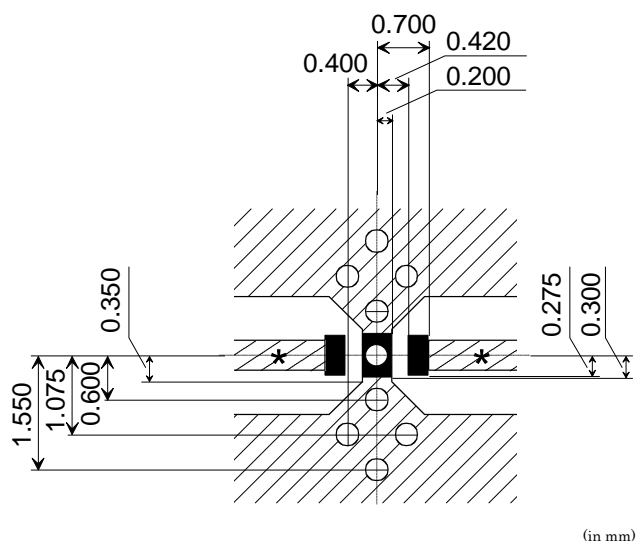
(in mm)

Mark	Dimension	Mark	Dimension
L	$1.6 \pm 0.1$	a2	$0.40 \pm 0.10$
W	$0.8 \pm 0.1$	c1	$0.55 \pm 0.10$
T	0.65 max.	c2	$0.60 \pm 0.10$
a1	$0.25 \pm 0.10$	e	$0.23 \pm 0.05$

### TERMINAL CONFIGURATION

Terminal No.	Terminal Name	Terminal No.	Terminal Name
(1)	IN	(3)	OUT
(2)	GND	-	-

## 3. Land Pattern



(in mm)

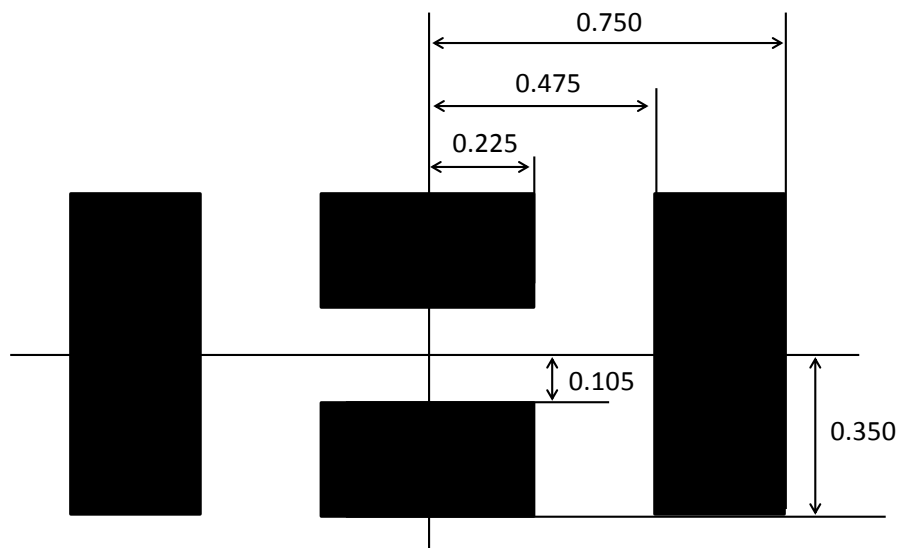
- Land
- Solder resist
- No pattern
- Solder resist
- Through Hole  $\Phi 0.30$

\* Line width to be designed to match 50 ohm characteristic impedance,  
Depending on PCB material and thickness.

## Reference

Murata recommends Land pattern and Stencil in case divided GND pad shape is preferred.

### <Land Pattern>

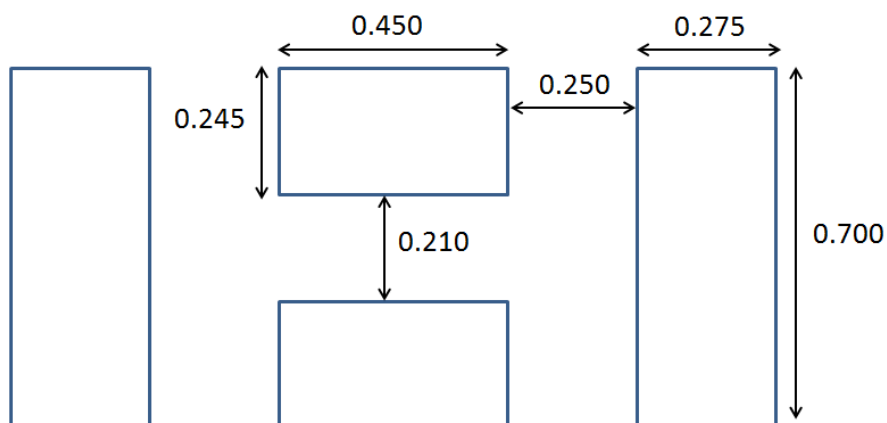


(in mm)

### <Stencil condition>

Opening Area is 100% to PCB land

Stencil Mask Thickness is 100um



(in mm)



Stencil Open area

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- Undersea equipment.
- Medical equipment.
- Traffic signal equipment.
- Burning / explosion control equipment
- Application of similar complexity and/ or reliability requirements to the applications listed in the above.
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- Power plant control equipment
- Transportation equipment (vehicles, trains, ships, elevator, etc.).
- Disaster prevention / crime prevention equipment.

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