



**THE DATASHEET OF  
LFD21868MMF5E233**

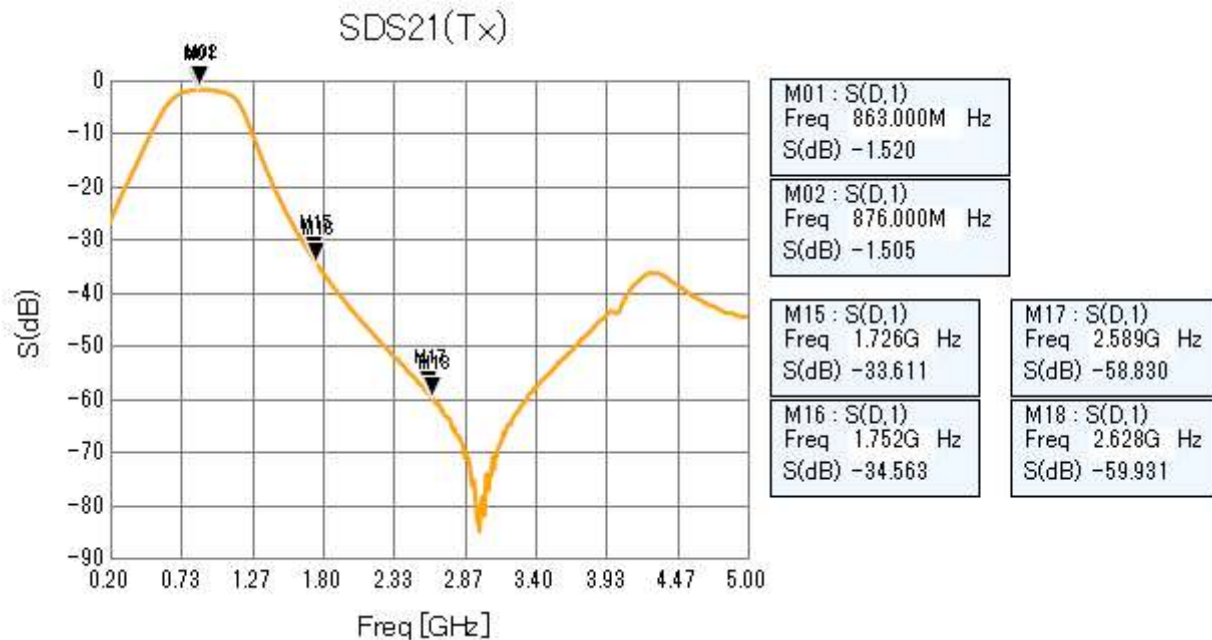


## DUAL MATCHING FILTER

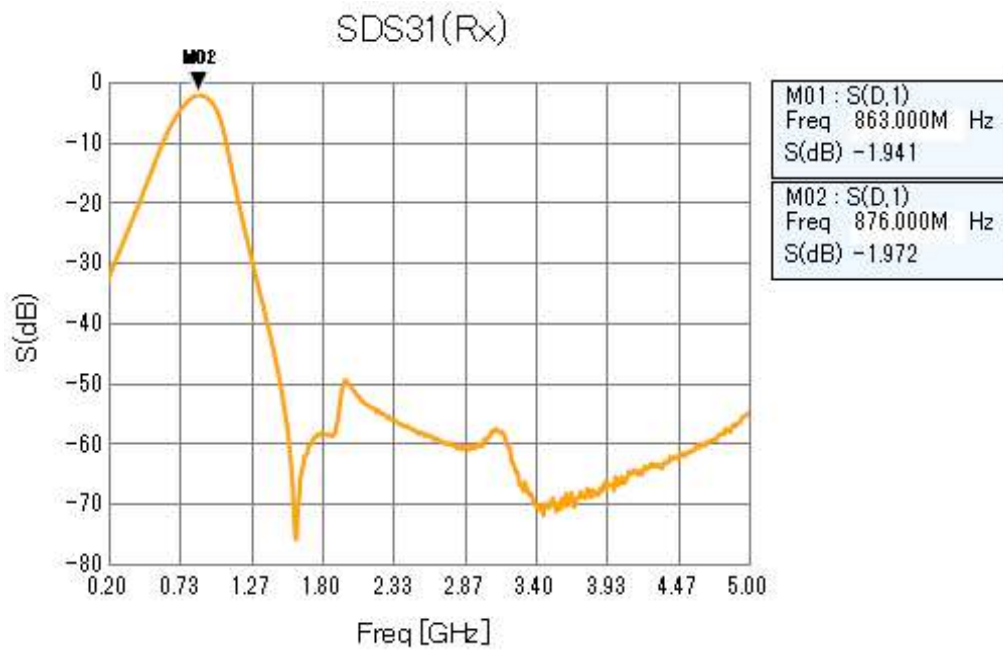
### 1. Characteristics (at -40 ~ +85°C)

Tentative Part Number	LFD21868MMF5E233	
Frequency Range (BW)	869.50 ± 6.50 MHz	
ANT Port Impedance (Nominal)	50 Ω	
Tx/Rx/TRx Port Impedance (Nominal)	Conjugate match with Silicon Labs EFR32FG series	
Insertion Loss in BW	Tx	1.81 dB max. at 25°C 2.01 dB max. at -40~ +85°C
	Rx	2.50 dB max. at 25°C 3.00 dB max. at -40~ +85°C
Attenuation (Absolute value)	Tx	30.0 dB min. at 2f <sub>0</sub> 39.0 dB min. at 3f <sub>0</sub>
ANT Port V.S.W.R. in Tx BW	2.10 max.	
Power Capacity	500 mW max.	

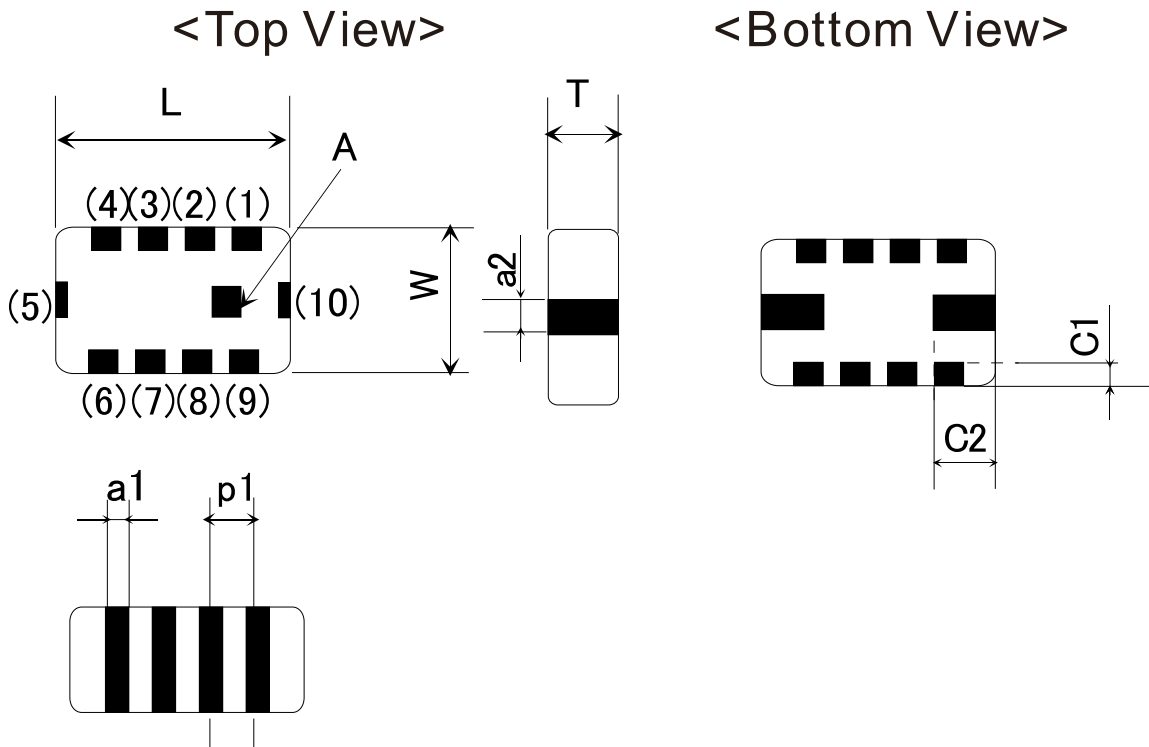
TX



RX



## 2. Construction, Dimensions &amp; Marking



Mark	Meaning
A	Directional Input Mark

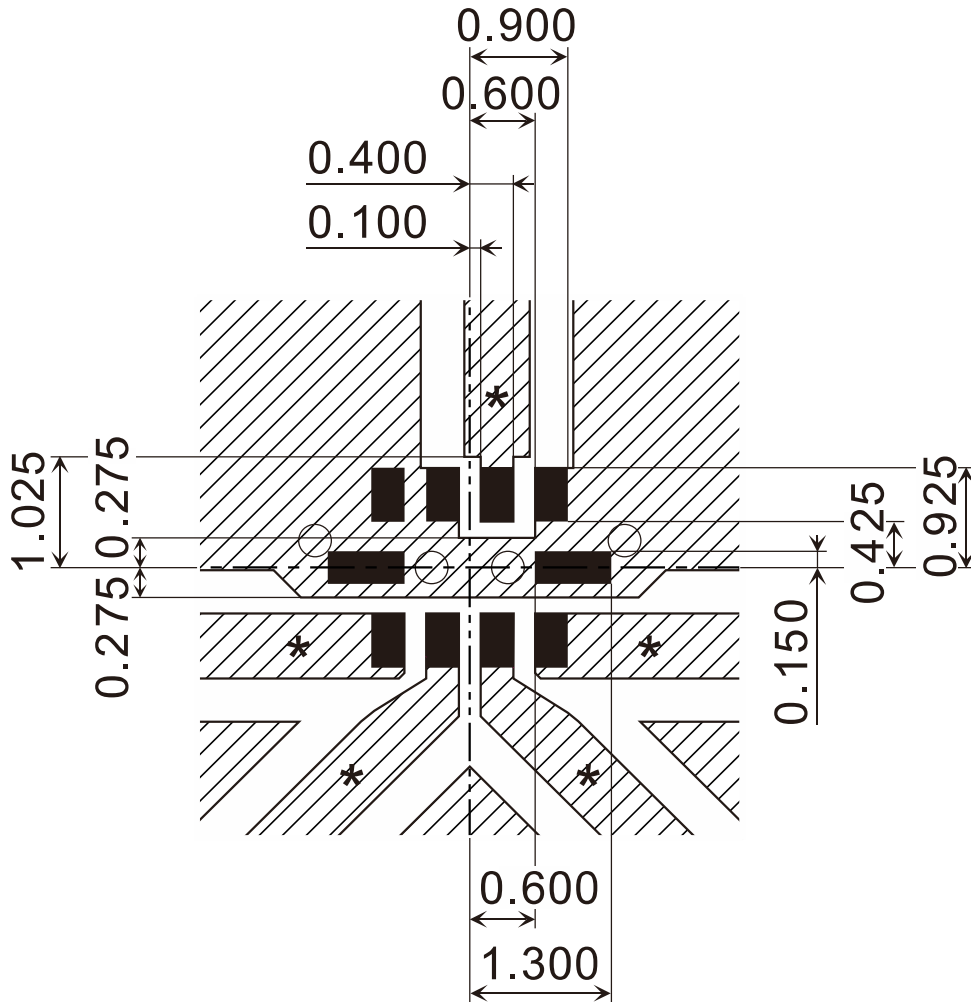
(in mm)

Mark	Dimension	Mark	Dimension
L	2.00±0.15	a2	0.30±0.15
W	1.25±0.15	c1	0.20±0.15
T	0.7max	c2	0.40±0.15
a1	0.25±0.15	p1	0.50±0.15





**TERMINAL CONFIGURATION**

Terminal No.	Terminal Name	Terminal No.	Terminal Name
(1)	GND	(6)	RX_N
(2)	ANT	(7)	RX_P
(3)	GND	(8)	TX_N
(4)	GND	(9)	TX_P
(5)	GND	(10)	DC-Feed or 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 $\Omega$  characteristic impedance, depending on PCB material and thickness.



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

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