

**Description**: 2012 Band Pass Filter

PART NUMBER: BPF2012LKBMR6580A

(Preliminary)

# Features:

- Compact size
- RoHS compliant
- AEC-Q200 Qualified

# **Applications:**

- IEEE 802.15.4
- UWB

### **ELECTRICAL SPECIFICATIONS**

DESCRIPTION	Value				
Pass Band	6240~8240 MHz				
Insertion Loss	1.86 dB(Typ.) 2.5 dB (Max.) at 25°C 2.5 dB (Max.) at -40~85°C				
Return Loss	12.2dB(Typ.) 10 dB (Min.)				
Attenuation	38.7 dB (Typ.) 35 dB (Min.) @ DC~5200 MHz 16.9 dB (Typ.) 15 dB (Min.) @ 5200~5860 MHz 27.8 dB (Typ.) 10 dB (Min.) @ 9000~9500 MHz 33 dB (Typ.) 30 dB (Min.) @ 9500~18000 MHz				
Group delay	0.81 ns (Typ.) 3 ns (Max.) @ 6240~8240 MHz				
Group delay ripple	0.44 ns (Typ.) 1 ns (Max.) @ 6240~8240 MHz				
Operating Temperature	-40 ~ +125°C				
Power Capacity	3W Max.				

In the effort to improve our products, we reserve the right to make changes judged to be necessary. CONFIDENTIAL AND PROPRIETARY INFORMATION



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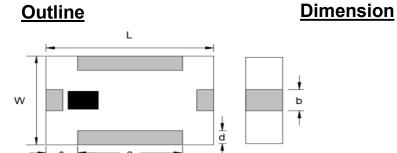


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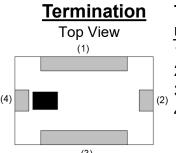
### **MECHANICAL DIMENSION**



L	W	Т	а	
2.00±0.15	1.25±0.10	0.95±0.10	1.25±0.15	
b	V	d		
0.30±0.15	0.30±0.15  0.35±0.15			

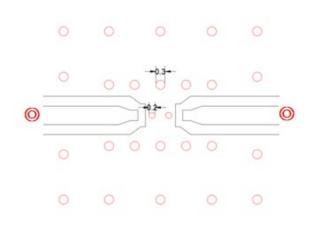
NOTE: Dimensions in mm.

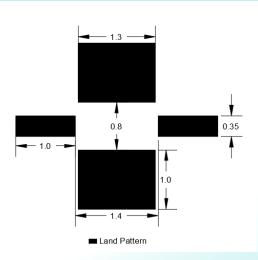




Terminal name	Function
1	GND
2	IN/OUT (not connected to GND)
3	GND
<sup>'</sup> 4	IN/OUT (not connected to GND)

# Reference design of EVB





Unit: mm

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

RŏHS

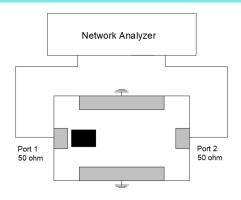


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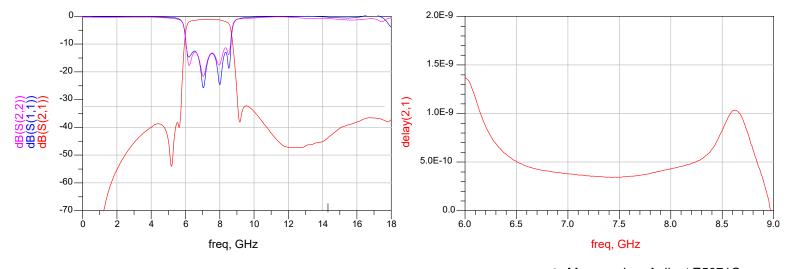
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# **MEASURING DIAGRAM**



Test Instrument : Agilent E5071C Network Analyzer or equivalent.

### **ELECTRICAL PERFORMANCES**



Measured on Agilent E5071C
 Network Analyzer

Frequency Characteristics



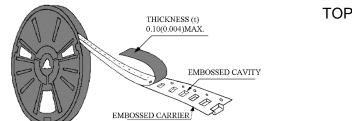
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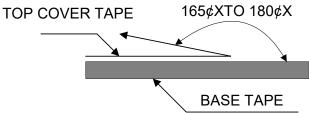
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## **PACKING SPECIFICATION**

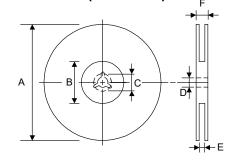
### Peel-off force





The force for peeling of cover tape is 10 grams in the arrow direction.

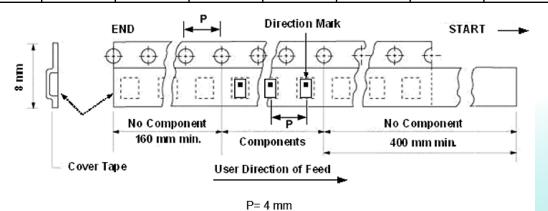
### **Dimension (Unit: mm)**



TYPE	Α	A B C D		E	F	
8 mm	178±1	60+0.5 -0	-	13±0.2	9±0.5	12±0.5
12 mm	178±0.3	60±0.2	19.3±0.1	13.5±0.1	13.6±0.1	-

### **Taping quantity**

SERIES	5824 5724	5320 5220	4532	4516	3225	3216 2520	2012 1608	1005 0605
PCS/Reel	5000	3000	1000	2000	2500	3000	4000	10000



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# **REVISION HISTORY**

Revision Date Description

Preliminary Nov. 16, 2022 - New issue