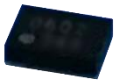
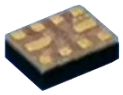
Data Sheet for SAW Components

Band 20 + 28

Dual Filter





Product ID: LBB0847D0M

Date: Nov. 12, 2022
Revision: 1.2

Features

- Package Size : 1.5 x 1.1 x 0.5max mm
- Single-Ended Input and Output
- Terminating Impedance : 50 Ω
- Moisture Sensitivity Level 3
- ESD Sensitive Device

Electrical Specifications Band20+28 Dual Filter

Temperature Range for Specification : −30 to +85 ° C

Rx to Ant					Min.	Typ.	Max.	Unit
Insertion Loss								
	758	–	803	MHz	–	2.3	2.8	dB
	791	–	821	MHz	–	2.4	2.9*1	dB
Pass Band Ripple								
	758	–	803	MHz	–	1.2	2.0	dB
	791	–	821	MHz	–	0.9	1.8*1	dB
VSWR Rx								
	758	–	803	MHz	–	1.7	2.4	–
	791	–	821	MHz	–	1.7	2.4*1	
VSWR Ant								
	758	–	803	MHz	–	1.9	2.4	–
	791	–	821	MHz	–	1.9	2.4*1	
Absolute Attenuation								
	10	–	700	MHz	20	28	–	dB
	703	–	748	MHz	32	36	–	dB
	832	–	862	MHz	30	34	–	dB
	880	–	915	MHz	30	33	–	dB
	1516	–	1642	MHz	35	41	–	dB
	1710	–	1785	MHz	35	45	–	dB
	2274	–	2463	MHz	35	45	–	dB
	2400	–	2500	MHz	35	45	–	dB
	2500	–	6000	MHz	25	33	–	dB

*1: +23 to +27 ° C

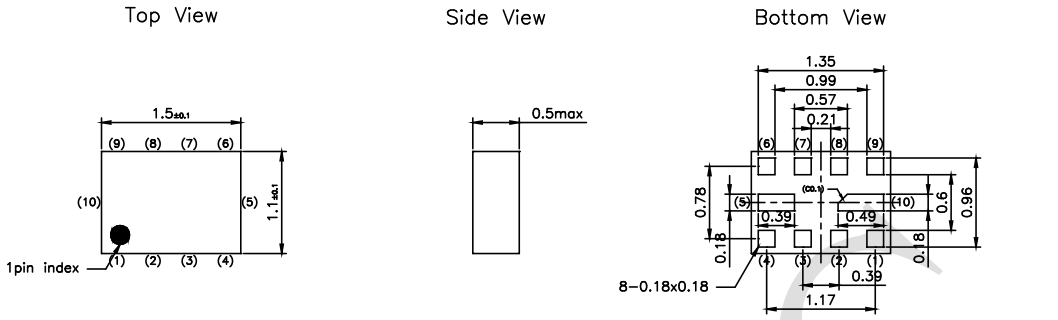
Maximum Ratings

Item	Rating	Condition / Remark
Storage Temperature	−40 to +85 ° C	
DC Voltage	5 V	+25 ° C
Input power	+15 dBm	LTE , +55 ° C , 5000 h

Recommended Operating Conditions

Item	Rating	Condition / Remark
Operating Temperature, T_{CASE}	−30 to +85 ° C	

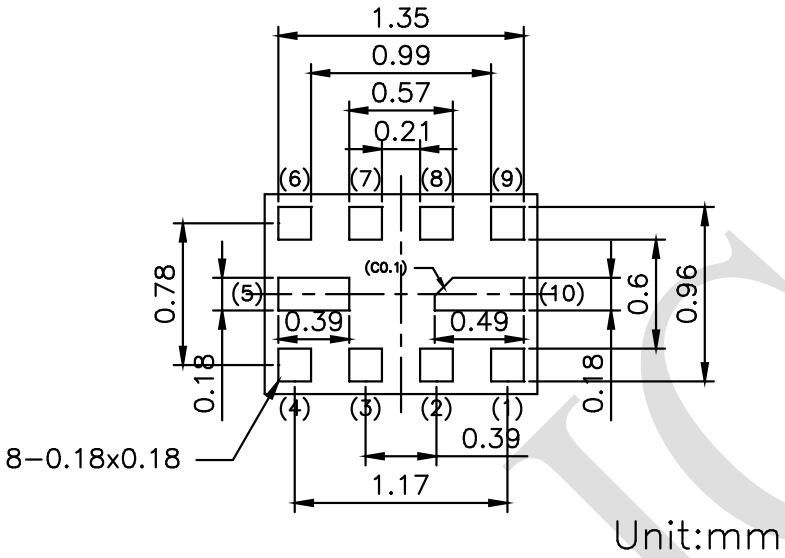
Package Information



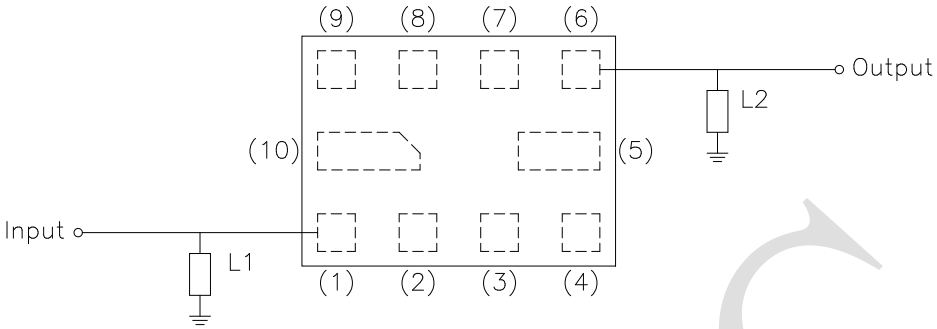
Unit:mm

Pin Configuration		
1	:	Input port ANT
6	:	Output port Rx
Other	:	GND

Land Pattern



Application Circuit

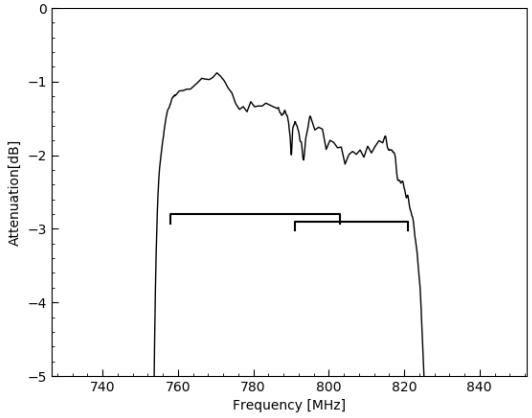


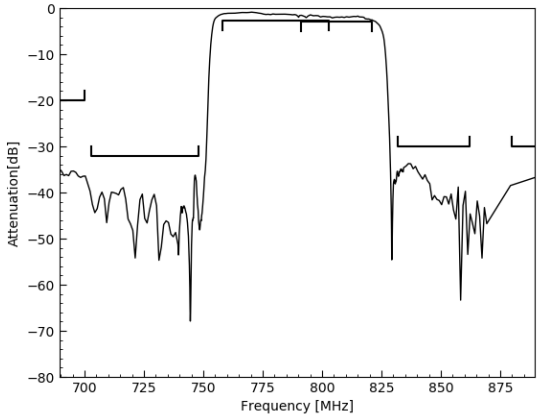
Port	Terminating Z	Matching Component
Input ANT	50 Ω	L1 : 8.2nH (Ideal inductor)
Output Rx	50 Ω	L2 : 8.2nH (Ideal inductor)

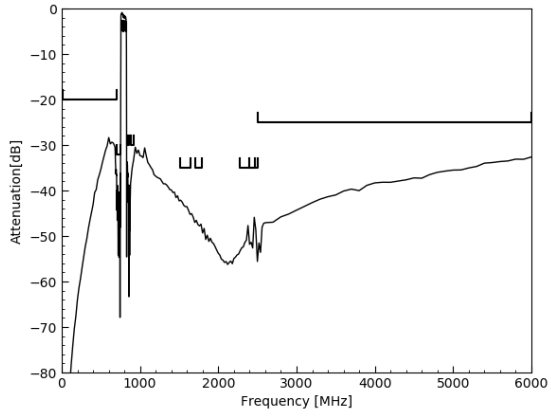
For ESD protection, external shunt inductor at all ports is recommended.

Electrical Characteristics Band20+28 Dual Filter

Input to Output

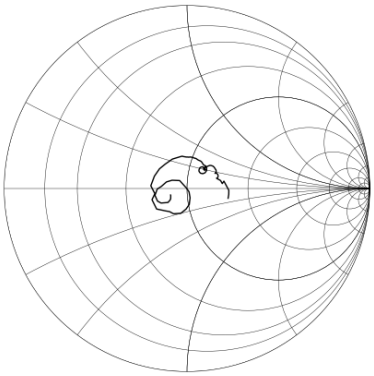




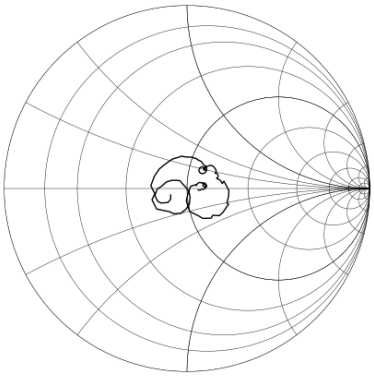


Electrical Characteristics Band20+28 Dual Filter

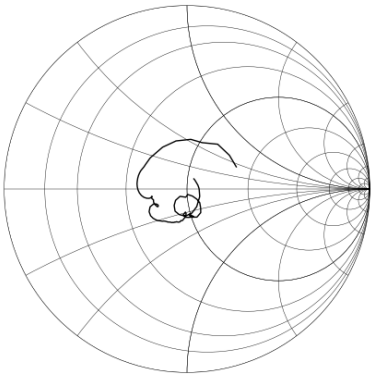
B28Rx Input Impedance



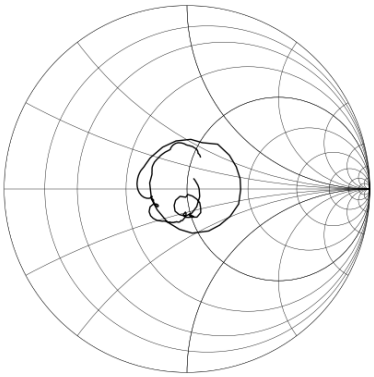
B20Rx Input Impedance



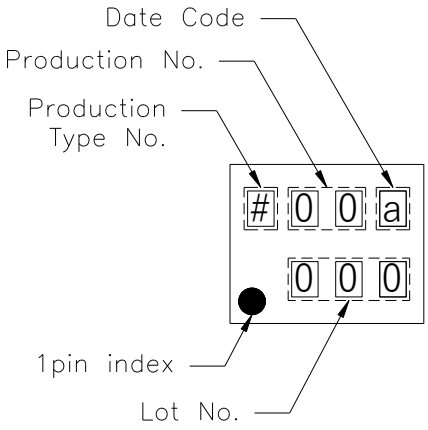
B28Rx Output Impedance



B20Rx Output Impedance



Marking Information



Production type No.(S: Sample, P: Production)

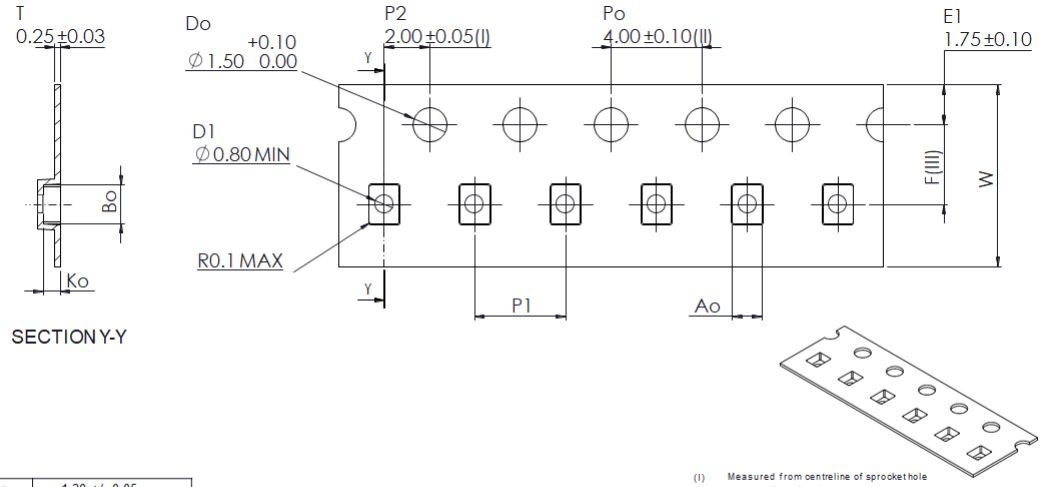
Product No. : 0M

Lot No.(Indicated by 0 ~ 9 or A to Z and a to z, except I, O, i, o and l)

Product date code:

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2021	N	P	Q	R	S	T	U	V	W	X	Y	Z
2022	a	b	c	d	e	f	g	h	j	k	l	m
2023	n	p	q	r	s	t	u	v	w	x	y	z
2024	A	B	C	D	E	F	G	H	J	K	L	M

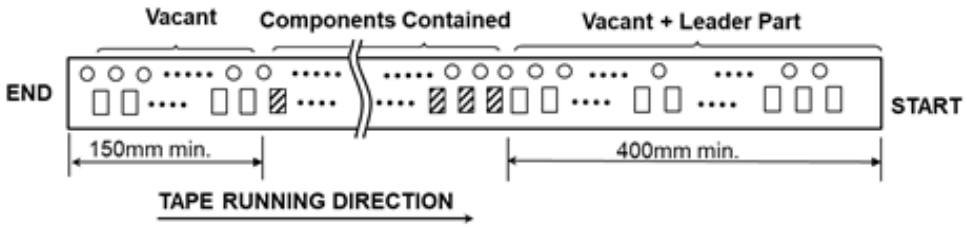
Tape Information



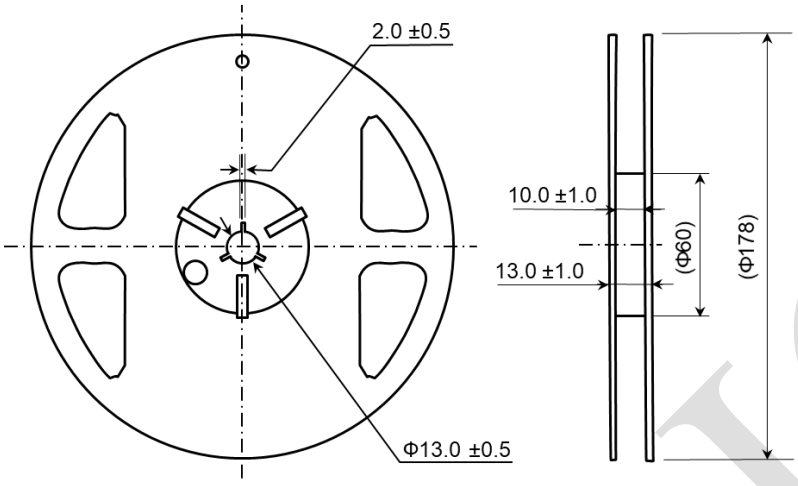
Ao	1.30 +/- 0.05
Bo	1.70 +/- 0.05
Ko	0.74 +/- 0.05
F	3.50 +/- 0.05
P1	4.00 +/- 0.10
W	8.00 +0.30/- 0.10

(I) Measured from centreline of sprocket hole to centreline of pocket.
(II) Cumulative tolerance of 10 sprocket holes is ± 0.20.
(III) Measured from centreline of sprocket hole to centreline of pocket.
(IV) Other material available.

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED.

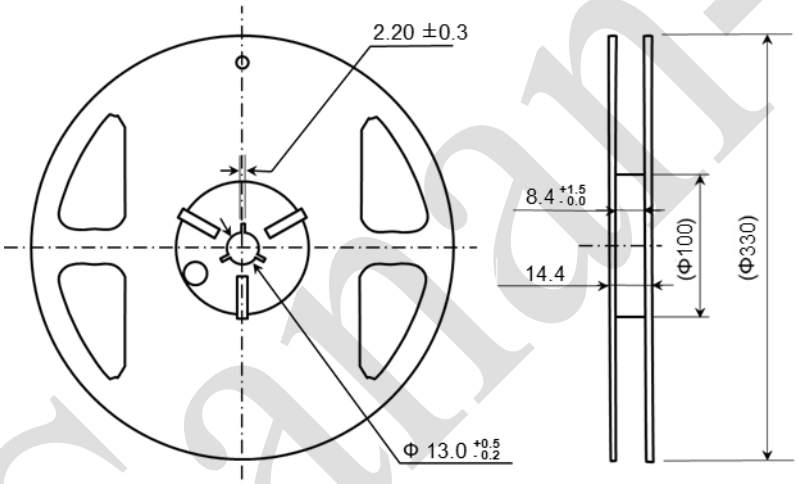


Reel Information



Φ178 Reel Dimension

UNIT: mm



Φ330 Reel Dimension

UNIT: mm

Ordering Code

Part Number	Description
LBB0847D0M-SA	Bulk (few pieces)
LBB0847D0M-MB	Tape & Reel 3,000 pcs/reel
LBB0847D0M-MC	Tape & Reel 10,000 pcs/reel
LBB0847D0M-SZ	EVB

Revision History

Revision	Date	Description
1.0	Oct. 14, 2021	● Initial release
1.1	Oct. 24, 2022	● Electrical Item update； Miss information “Tx” to “Rx”
1.2	Nov. 12, 2022	● Update “Tape Information.”

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