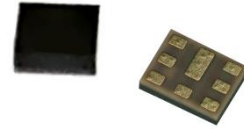


Data Sheet for SAW Components



Band 5

Duplexer

Product ID: LBD0882B0G

Date: Dec. 21, 2020

Revision: 2.1 Preliminary

Features

- ◆ Package Size : 1.8 x 1.4 x 0.5max mm
- ◆ Single-Ended Input and Output
- ◆ Terminating Impedance : 50 Ω
- ◆ Moisture Sensitivity Level 3
- ◆ ESD Sensitive Device

Electrical Specifications Band5 Duplexer

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

Tx to Ant			Min.	Typ.	Max.	Unit
Insertion Loss						
	824 - 849	MHz	-	1.4	2.0	dB
Pass Band Ripple						
	824 - 849	MHz	-	0.6	1.4	dB
VSWR						
	824 - 849	MHz	-	1.4	2.0	-
Absolute Attenuation						
	10 - 420	MHz	35	41	-	dB
	420 - 494	MHz	35	37	-	dB
	699 - 716	MHz	30	32	-	dB
	728 - 764	MHz	30	32	-	dB
	869 - 894	MHz	45	55	-	dB
	1559 - 1563	MHz	40	46	-	dB
	1565.42 - 1573.374	MHz	40	47	-	dB
	1573.374 - 1577.466	MHz	40	47	-	dB
	1577.466 - 1585.42	MHz	40	47	-	dB
	1597.5515 - 1605.886	MHz	40	47	-	dB
	1638 - 1708	MHz	35	46	-	dB
	1710 - 1785	MHz	30	44	-	dB
	1920 - 1990	MHz	30	39	-	dB
	2110 - 2170	MHz	30	37	-	dB
	2400 - 2494	MHz	30	36	-	dB
	2472 - 2547	MHz	30	36	-	dB
	3286 - 3406	MHz	5	14	-	dB
	4110 - 4255	MHz	5	14	-	dB
	4900 - 5950	MHz	5	12	-	dB
	6582 - 6802	MHz	1	11	-	dB
	7406 - 7651	MHz	1	9	-	dB

Electrical Specifications Band5 Duplexer

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

Ant to Rx		Min.	Typ.	Max.	Unit
Insertion Loss					
	869 - 894 MHz	-	1.4	2.0	dB
Pass Band Ripple					
	869 - 894 MHz	-	0.4	1.0	dB
VSWR					
	869 - 894 MHz	-	1.4	2.0	-
Absolute Attenuation					
	10 - 447 MHz	50	55	-	dB
	45 MHz	50	95	-	dB
	447 - 824 MHz	45	48	-	dB
	824 - 849 MHz	45	59	-	dB
	849 - 854 MHz	30	64	-	dB
	909 - 979 MHz	10	16	-	dB
	1693 - 2682 MHz	50	57	-	dB
	3476 - 3576 MHz	40	70	-	dB
	4345 - 4470 MHz	33	61	-	dB
	4900 - 5950 MHz	22	39	-	dB
	5214 - 5364 MHz	22	49	-	dB
	6083 - 6258 MHz	20	35	-	dB
	6952 - 7152 MHz	20	27	-	dB
	7821 - 8000 MHz	20	26	-	dB

Electrical Specifications Band5 Duplexer

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

Tx to Rx		Min.	Typ.	Max.	Unit
Isolation					
	824 - 849 MHz	55	57	-	dB
	869 - 894 MHz	52	55	-	dB
	1574 - 1577 MHz	40	66	-	dB
	1683 - 1708 MHz	20	65	-	dB
	2462 - 2557 MHz	20	60	-	dB

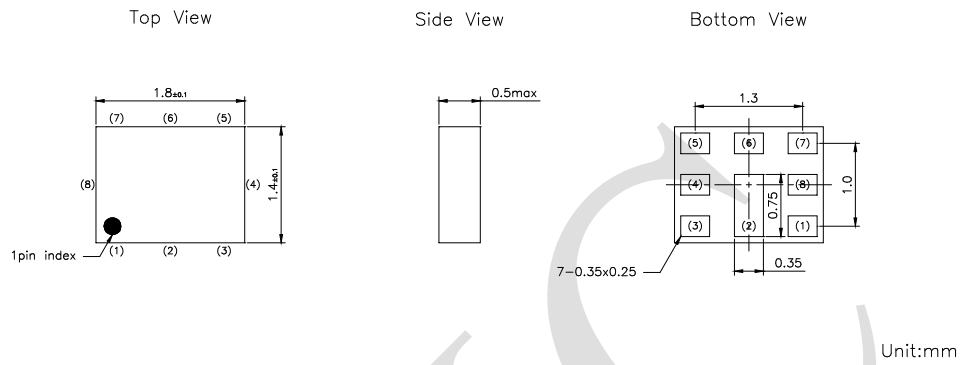
Maximum Ratings

Item	Rating	Condition / Remark
Storage Temperature	-40 to +85 °C	
DC Voltage	5 V	+25 °C
Input Power	+29 dBm	LTE , +55 °C , 5000 h
	+30 dBm	LTE , +55 °C , 2000 h

Recommended Operating Conditions

Item	Rating	Condition / Remark
Operating Temperature, T _{CASE}	-30 to +85 °C	

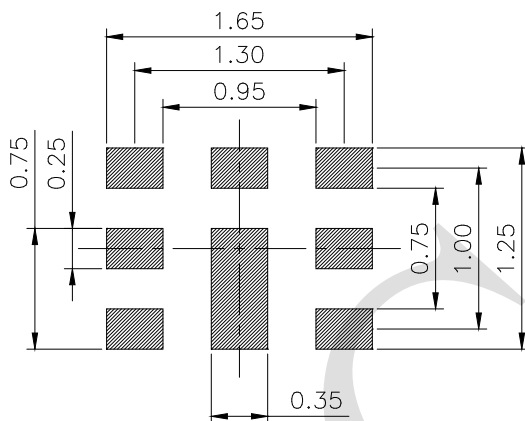
Package Information



Pin Configuration

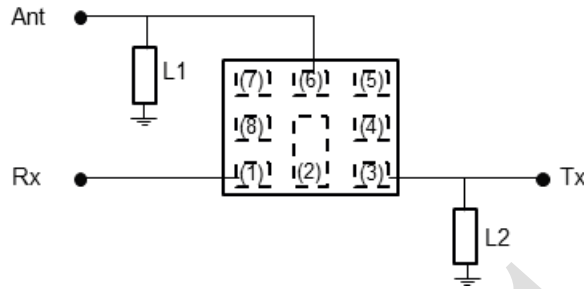
1 : Rx
 3 : Tx
 6 : Ant
 Other : GND

Land Pattern



Unit:mm

Application Circuit



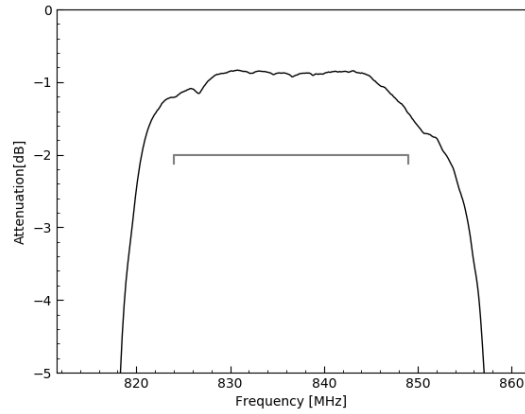
Port	Terminating Z	Matching Component		
Ant	50 Ω	L1 : 10nH (Idea inductor)		
Tx	50 Ω	L1 : 18nH (Idea inductor)		
Rx	50 Ω			

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

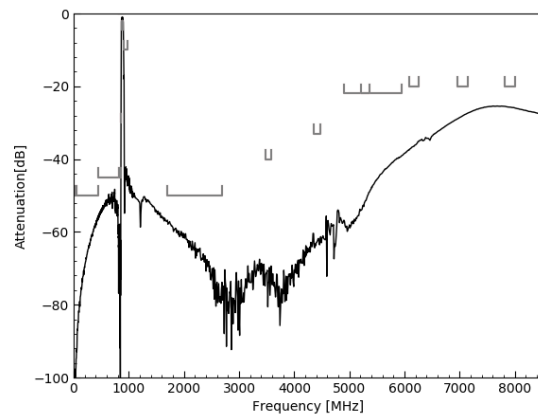
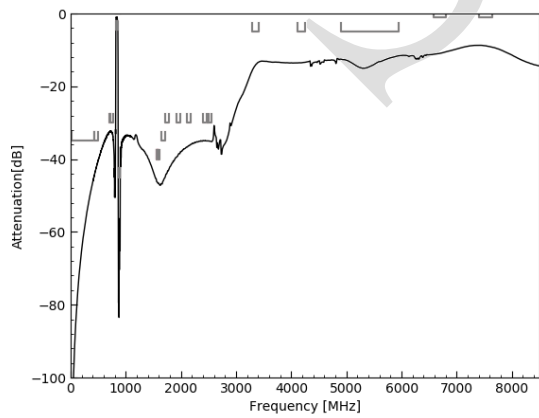
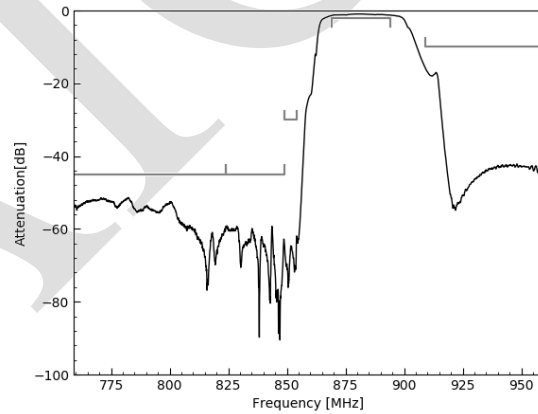
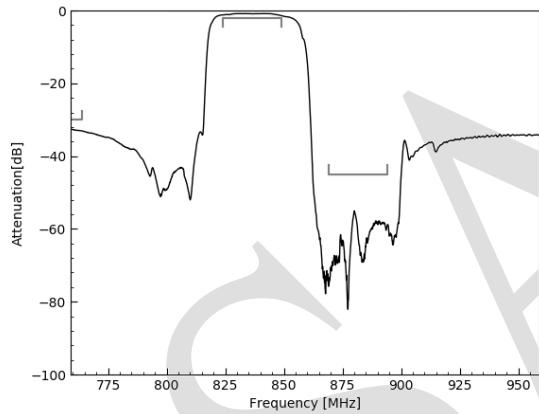
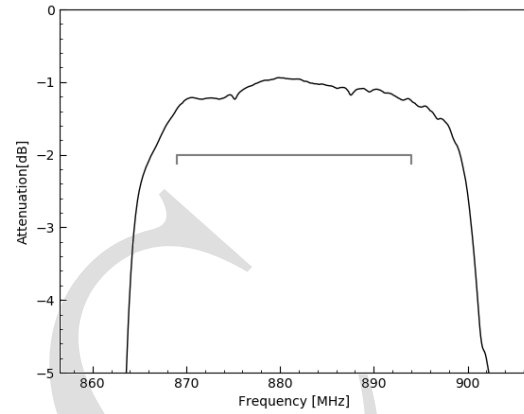
Electrical Characteristics

Band5 Duplexer

Tx to Ant



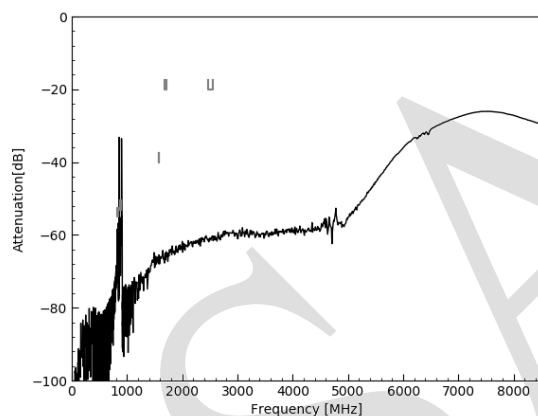
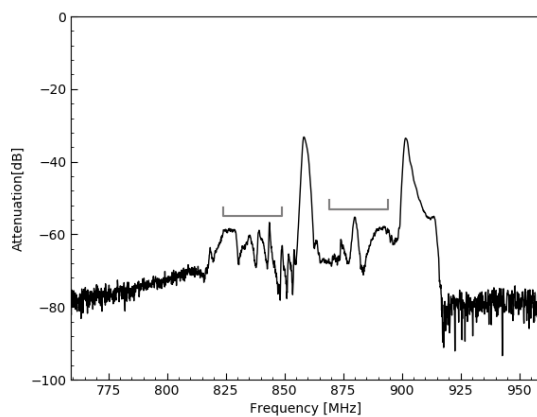
Ant to Rx



Electrical Characteristics

Band5 Duplexer

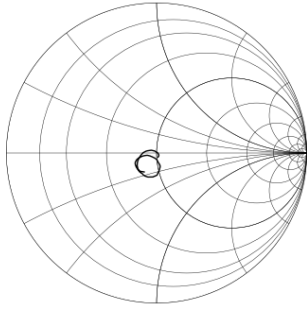
Tx to Rx



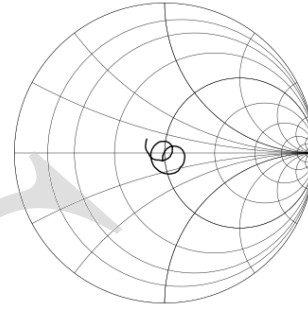
Electrical Characteristics

Band5 Duplexer

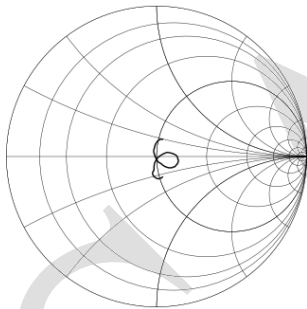
Ant Port Impedance



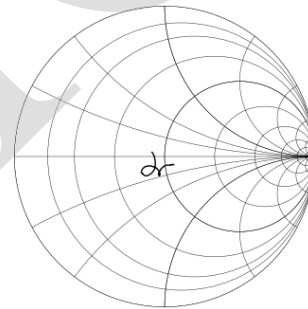
Ant Port Impedance



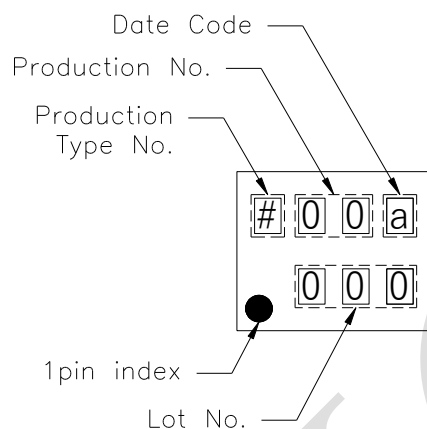
Tx Port Impedance



Rx Port Impedance



Marking Information



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

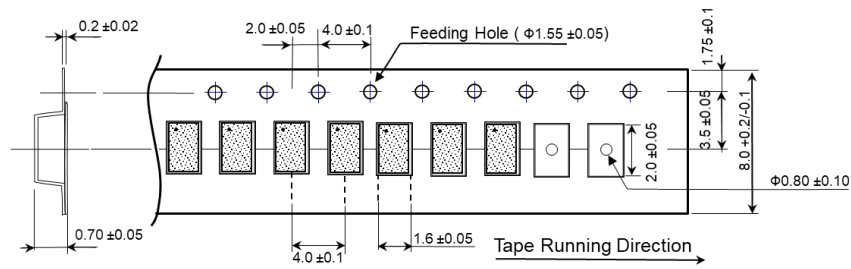
Product No. : 0G

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

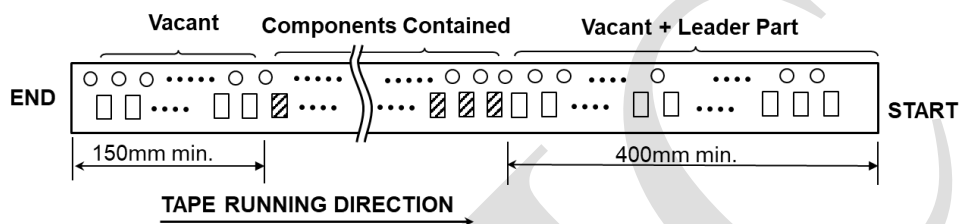
Product date code :

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2020	A	B	C	D	E	F	G	H	J	K	L	M
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

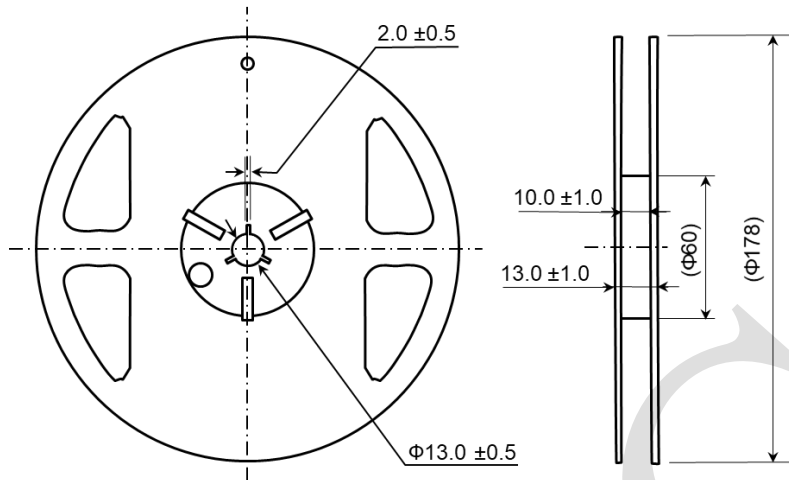
Tape Information



UNIT: mm

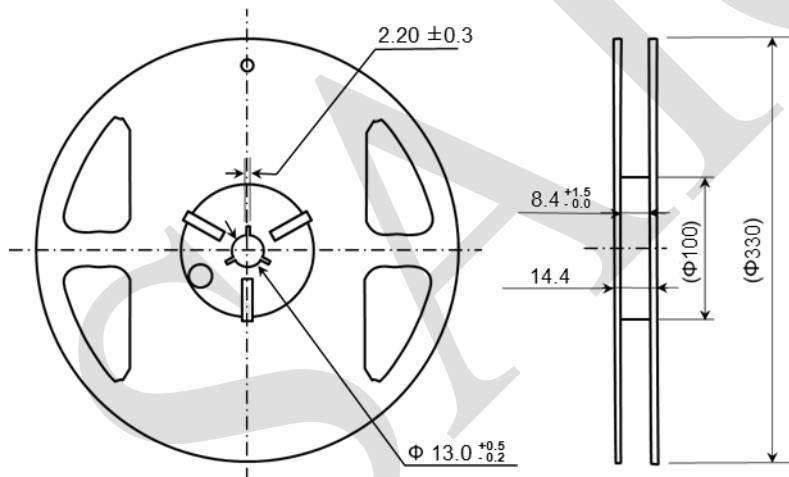


Reel Information



$\Phi 178$ Reel Dimension

UNIT: mm



$\Phi 330$ Reel Dimension

UNIT: mm

Ordering Code

Part Number	Description
LBD0882B0G-SA	Bulk (few pieces)
LBD0882B0G-MB	Tape & Reel 3,000 pcs/reel
LBD0882B0G-MC	Tape & Reel 10,000 pcs/reel
LBD0882B0G-SZ	EVB

SALIC

Revision History

Revision	Date	Description
1.0	Jan. 14, 2020	● Initial Release
2.0	Mar. 4, 2020	● Update "Input Power condition"
2.1	Dec. 21, 2020	● Update "Reel Information" and "Ordering Code"

SALC

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