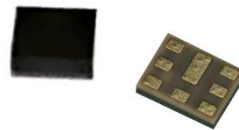


Data Sheet for SAW Components

Band26

Duplexer



Product ID: RBD0877G2T

Date: Nov. 1, 2022

Revision: 1.0

Features

- ◆ Package Size : 1.6 x 1.2 x 0.6max mm
- ◆ Single-Ended Input and Output
- ◆ Terminating Impedance : 50 Ω
- ◆ Moisture Sensitivity Level 3
- ◆ ESD Sensitive Device

Electrical Specifications Band26 Duplexer

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

Tx to Ant					Min.	Typ.	Max.	Unit
Insertion Loss								
	814.25	-	848.75	MHz	-	1.5	2.7	dB
	815	-	830	MHz	-	1.3	2.1	dB
	824.25	-	848.75	MHz	-	1.5	3.0	dB
	830	-	845	MHz	-	0.9	2.0	dB
Pass Band Ripple								
	814.25	-	848.75	MHz	-	0.7	1.5 ^{*1}	dB
VSWR Tx								
	814.25	-	848.75	MHz	-	1.4	2.0	-
VSWR Ant								
	814.25	-	848.75	MHz	-	1.4	2.0	-
Absolute Attenuation								
	10	-	420	MHz	35	46	-	dB
	420	-	494	MHz	36	43	-	dB
	494	-	701	MHz	35	38	-	dB
	701	-	728	MHz	35	38	-	dB
	728	-	764	MHz	35	39	-	dB
	764	-	804	MHz	5	38	-	dB
	859	-	894	MHz	40	53	-	dB
	1475.9	-	1510.9	MHz	35	50	-	dB
	1559	-	1563	MHz	35	51	-	dB
	1565.42	-	1573.37	MHz	35	51	-	dB
	1573.37	-	1577.47	MHz	35	51	-	dB
	1577.47	-	1585.42	MHz	35	51	-	dB
	1597.55	-	1605.89	MHz	35	51	-	dB
	1628	-	1698	MHz	35	48	-	dB
	1844.9	-	1879.9	MHz	35	42	-	dB
	1884.5	-	1919.6	MHz	35	43	-	dB
	1930	-	1995	MHz	36	41	-	dB
	2110	-	2170	MHz	35	39	-	dB
	2400	-	2690	MHz	30	36	-	dB

3256	-	3396	MHz	20	33	-	dB
3396	-	3800	MHz	27	31	-	dB
4070	-	4245	MHz	20	28	-	dB
4884	-	5950	MHz	20	31	-	dB
6512	-	6792	MHz	15	40	-	dB
7326		7641	MHz	15	39	-	dB
8140		8490	MHz	15	37	-	dB

*1: Over any 5 MHz in band

Electrical Specifications Band26 Duplexer

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

Ant to Rx					Min.	Typ.	Max.	Unit
Insertion Loss								
	859.25	-	893.75	MHz	-	1.9	3.3	dB
	860	-	875	MHz	-	1.6	3.2	dB
	869.25	-	893.75	MHz	-	1.0	3.0	dB
	875	-	890	MHz	-	0.8	2.5	dB
Pass Band Ripple								
	859.25	-	893.75	MHz	-	1.4	2.0 ^{*1}	dB
VSWR Rx								
	859.25	-	893.75	MHz	-	1.6	2.0	-
VSWR Ant								
	859.25	-	893.75	MHz	-	1.6	2.0	-
Absolute Attenuation								
	10	-	447	MHz	40	60	-	dB
			45	MHz	50	113	-	dB
	814	-	849	MHz	41	56	-	dB
	849	-	854	MHz	3	31	-	dB
	909	-	979	MHz	3	18	-	dB
	1427	-	1447	MHz	38	55	-	dB
	1710	-	1765	MHz	44	59	-	dB
	1850	-	1915	MHz	44	61	-	dB
	1920	-	1980	MHz	40	60	-	dB
	2400	-	2500	MHz	40	64	-	dB
	2467	-	2494	MHz	44	67	-	dB
	2577	-	2682	MHz	40	67	-	dB
	4900	-	5950	MHz	37	44	-	dB
	6013	-	6258	MHz	20	47	-	dB

*1: Over any 5 MHz in band

Electrical Specifications Band26 Duplexer

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

Tx to Rx				Min.	Typ.	Max.	Unit
Isolation							
	814.25	-	848.75 MHz	53	57	-	dB
	815	-	830 MHz	53	57	-	dB
	824.25	-	848.75 MHz	53	57	-	dB
	830	-	845 MHz	53	61	-	dB
	859.25	-	893.75 MHz	50	54	-	dB
	860	-	875 MHz	53	70	-	dB
	869.25	-	893.75 MHz	51	54	-	dB
	875	-	890 MHz	51	56	-	dB
	1574	-	1577 MHz	40	63	-	dB
	1628	-	1698 MHz	20	60	-	dB
	2442	-	2547 MHz	20	59	-	dB

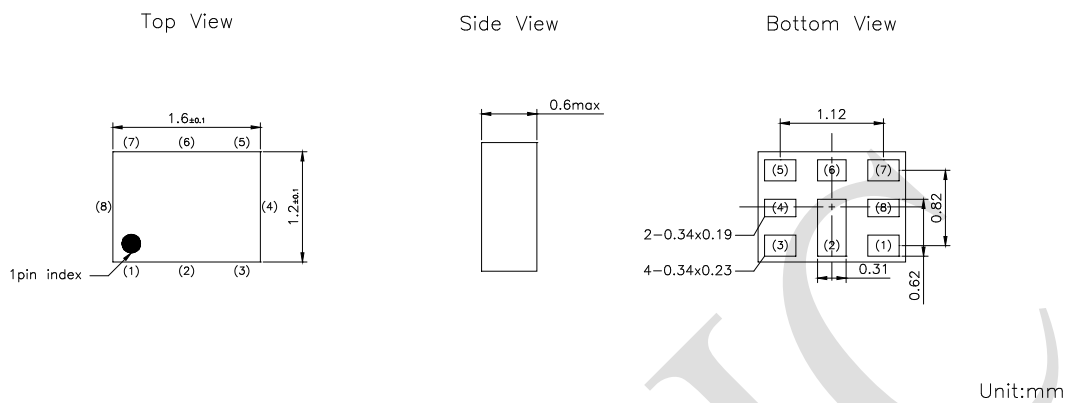
Maximum Ratings

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

Recommended Operating Conditions

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

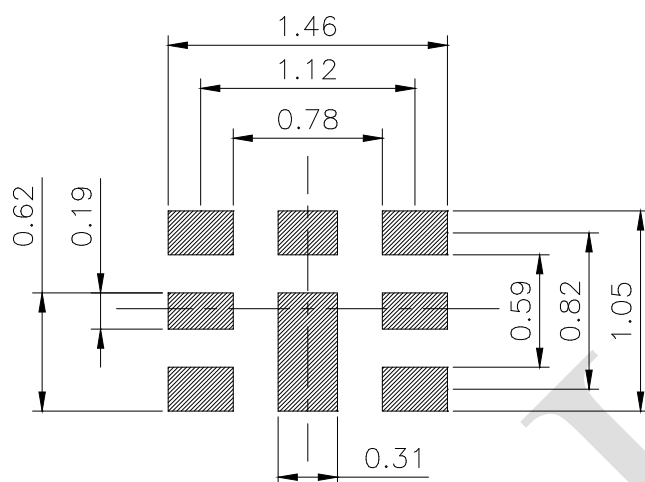
Package Information



Pin Configuration

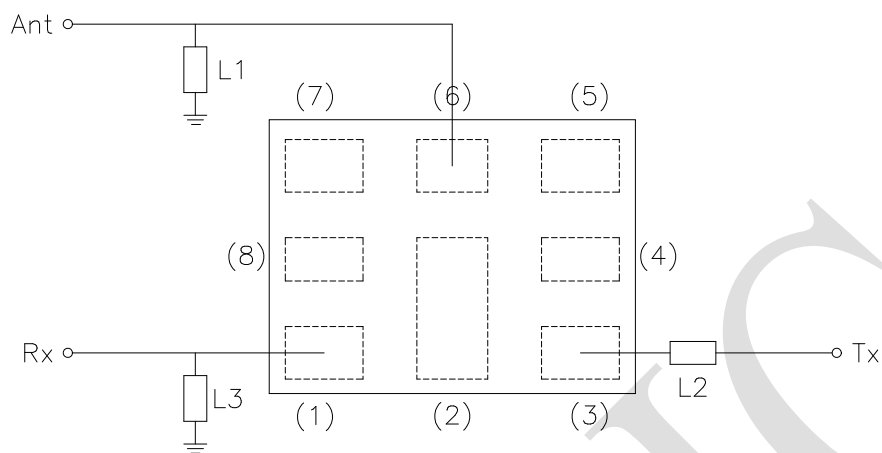
1	:	Rx
3	:	Tx
6	:	Ant
Other	:	GND

Land Pattern



Unit:mm

Application Circuit



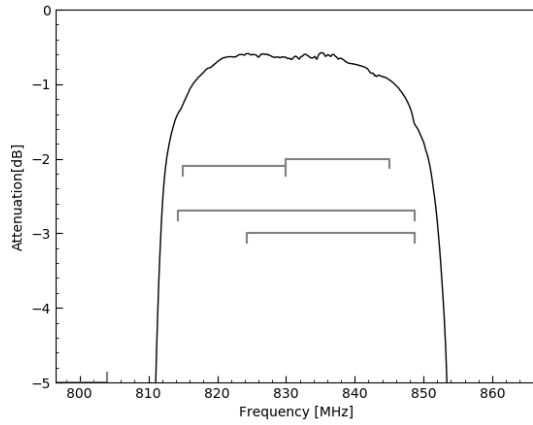
Port	Terminating Z	Matching Component
Ant	50 Ω	L1 : 10nH (Ideal inductor)
Tx	50 Ω	L2 : 4.7nH (Ideal inductor)
Rx	50 Ω	L3 : 50nH (Ideal inductor)

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

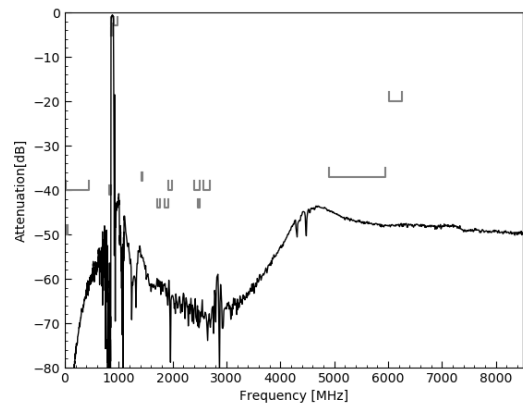
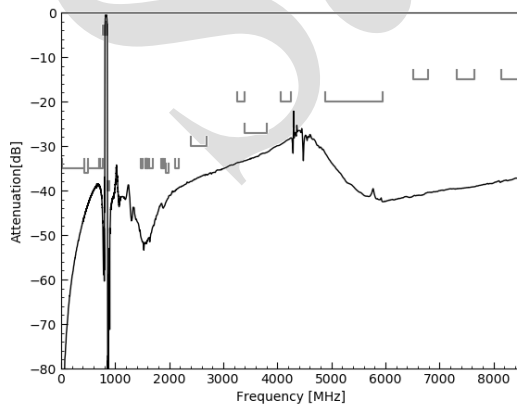
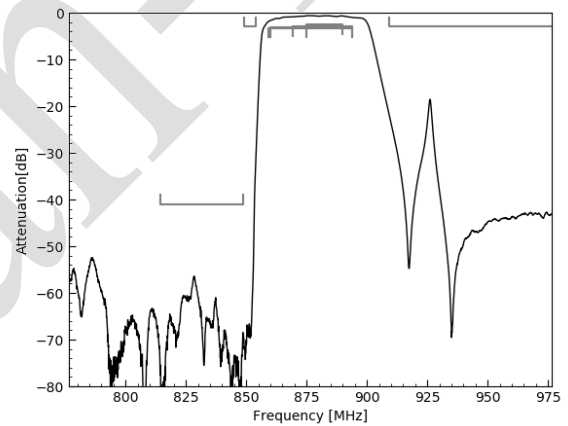
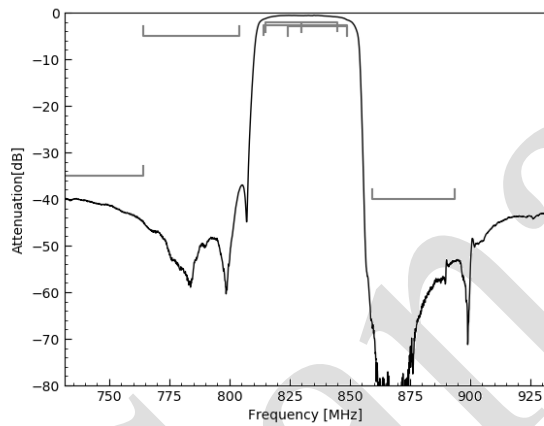
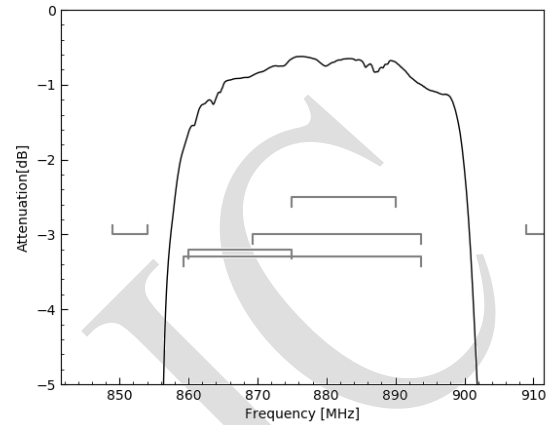
Electrical Characteristics

Band26 Duplexer

Tx to Ant



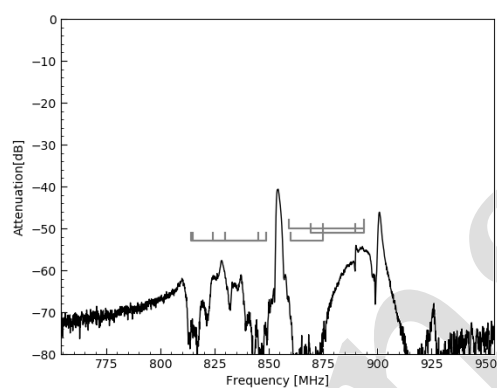
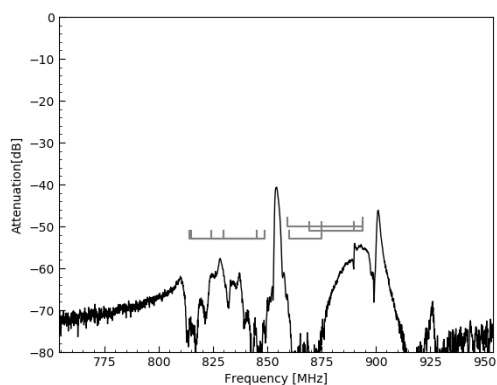
Ant to Rx



Electrical Characteristics

Band26 Duplexer

Tx to Rx

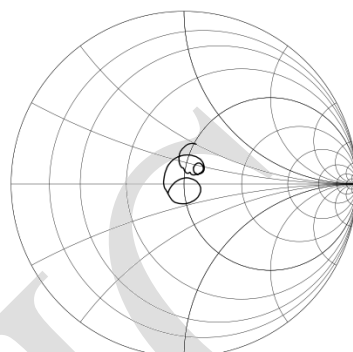
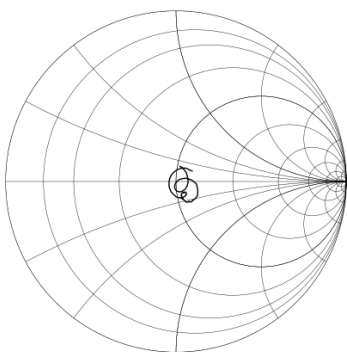


Electrical Characteristics

Band26 Duplexer

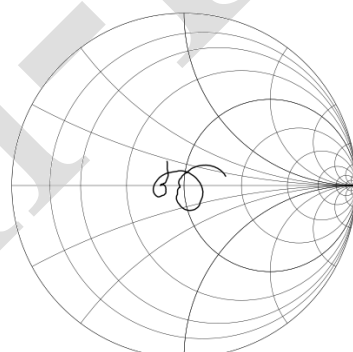
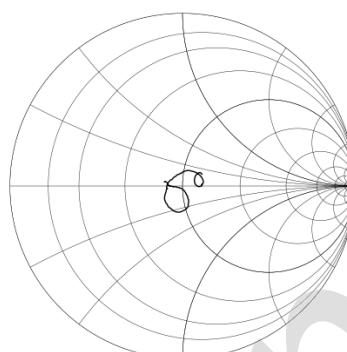
Ant Impedance (Tx band)

Ant Impedance (Rx band)

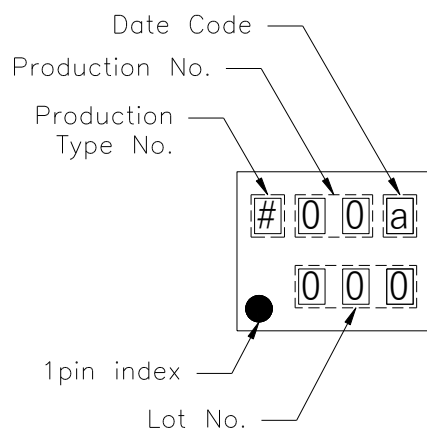


Tx Impedance

Rx Impedance



Marking Information



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

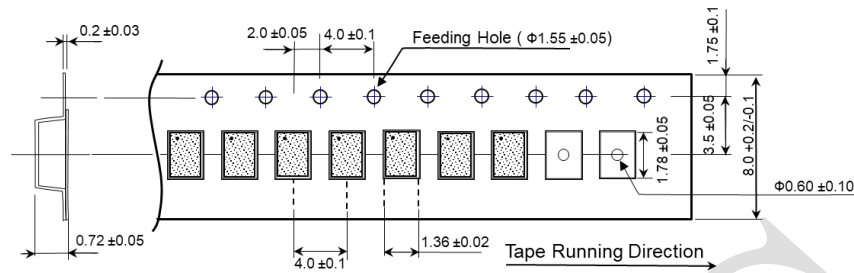
Product No. : 2T

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

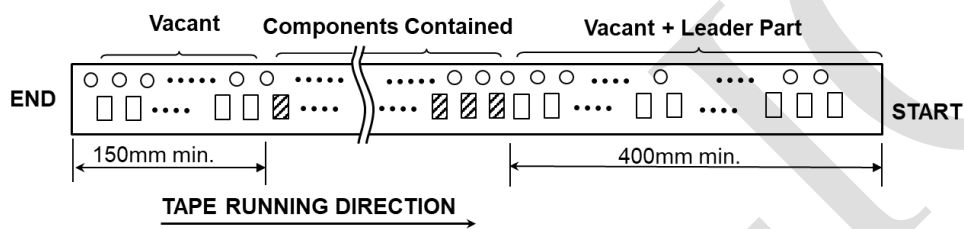
Product date code :

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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
2025	N	P	Q	R	S	T	U	V	W	X	Y	Z

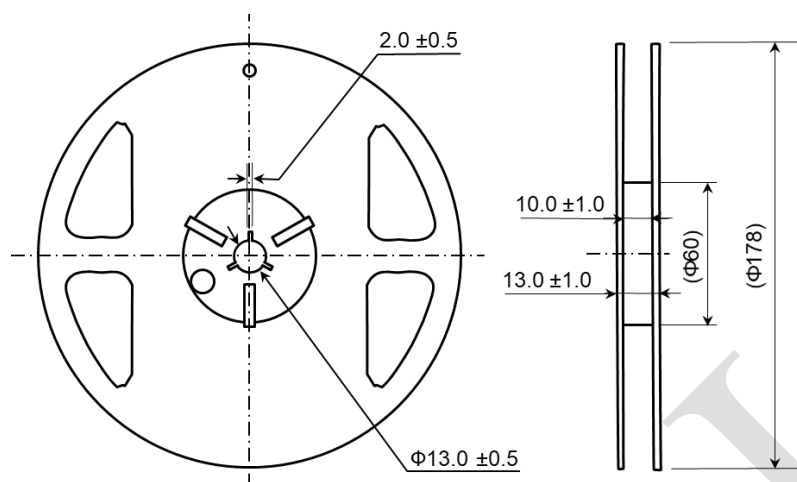
Tape Information



UNIT: mm

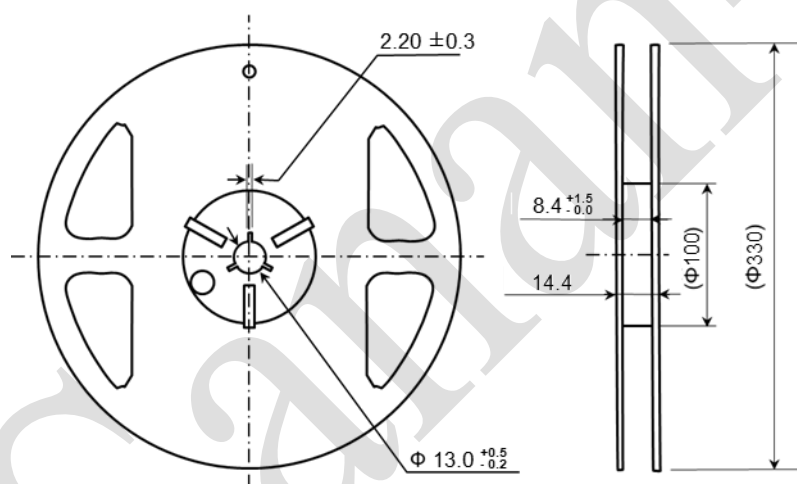


Reel Information



$\Phi 178$ Reel Dimension

UNIT: mm



$\Phi 330$ Reel Dimension

UNIT: mm

Ordering Code

Part Number	Description
RBD0877G2T-SA	Bulk (few pieces)
RBD0877G2T-MB	Tape & Reel 3,000 pcs/reel
RBD0877G2T-MC	Tape & Reel 10,000 pcs/reel
RBD0877G2T-SZ	EVB

Sanan-IC

Revision History

Revision	Date	Description
0.1	Jun. 9, 2022	● Initial release
1.0	Nov. 1, 2022	● Updated specification

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