

Data Sheet for SAW Components

SATCOM Rx

Single Filter



Product ID: RAS2185A3Q

Date: Feb 13, 2023

Revision: 0.1 Preliminary

Features

- ◆ Package Size : 1.1 x 0.9 x 0.5max mm
- ◆ Single-Ended Input and Output
- ◆ Terminating Impedance : 50 Ω
- ◆ Moisture Sensitivity Level 3
- ◆ ESD Sensitive Device
- ◆ TC-SAW
- ◆ Low Insertion Loss

Electrical Specifications SATCOM Rx Single Filter

Temperature Range for Specification : -20 to +85 °C

Ant to Rx					Min.	Typ.	Max.	Unit
Insertion Loss								
	2170	-	2200	MHz	-	1.8	3.0	dB
	2170	-	2200	MHz	-	1.8	2.4 ^{*1}	dB
Pass Band Ripple								
	2170	-	2200	MHz	-	1.2	2.2	dB
VSWR Ant								
	2170	-	2200	MHz	-	1.3	2.0	-
VSWR Rx								
	2170	-	2200	MHz	-	1.3	2.0	-
Absolute Attenuation								
	0.1	-	2145	MHz	30	34	-	dB
	2145	-	2150	MHz	20	33	-	dB
	2150	-	2155	MHz	15	28	-	dB
	2215	-	2220	MHz	7	13	-	dB
	2220	-	2225	MHz	17	27	-	dB
	2225	-	2245	MHz	30	35	-	dB
	2245	-	7125	MHz	20	24	-	dB
	2400	-	2483.5	MHz	45	49	-	dB

*1 : Room Temperature: 25°C

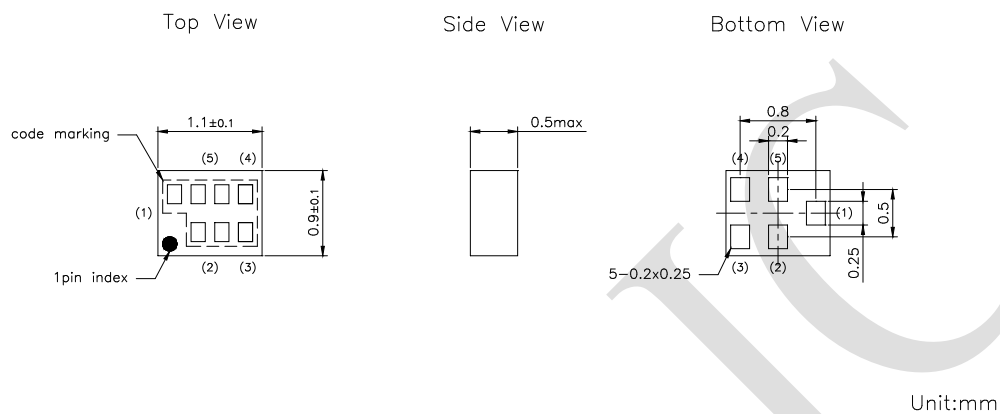
Maximum Ratings

Item	Rating	Condition / Remark
Storage Temperature	-40 to +85 °C	
DC Voltage	5 V	+25 °C
Input power	+15 dBm	LTE , +55 °C , 3000 h

Recommended Operating Conditions

Item	Rating	Condition / Remark
Operating Temperature, T _{CASE}	-20 to +85 °C	

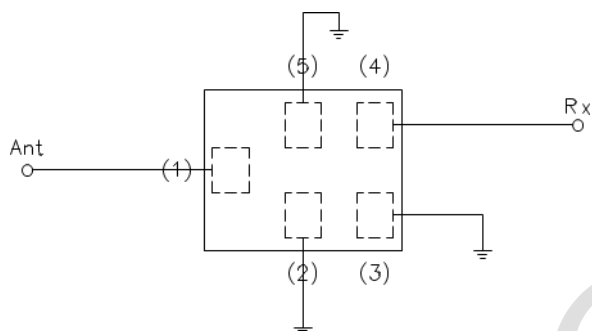
Package Information



Pin Configuration

1	:	Ant
4	:	Rx
Other	:	GND

Application Circuit



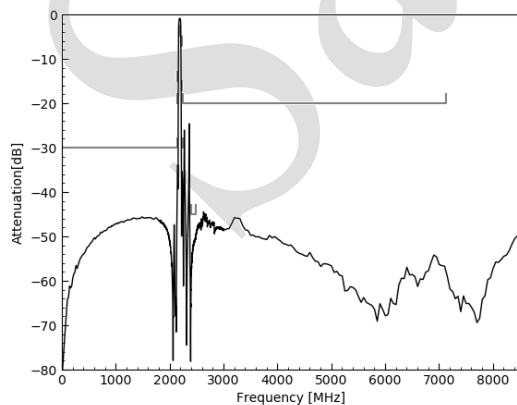
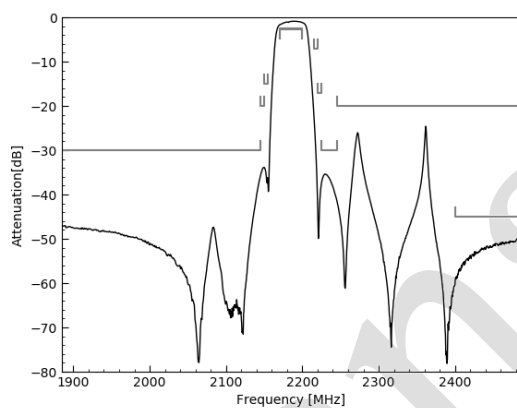
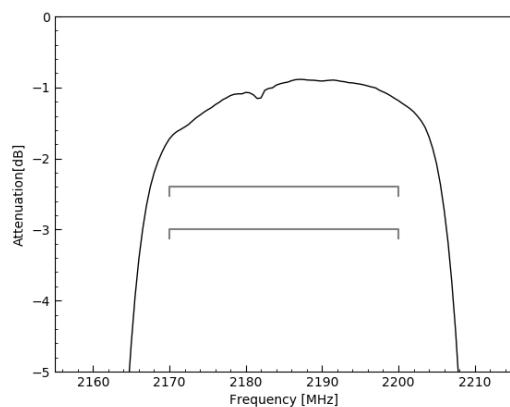
Port	Terminating Z	Matching Component
Ant	50 Ω	
Rx	50 Ω	

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

Electrical Characteristics

SATCOM Rx Single Filter

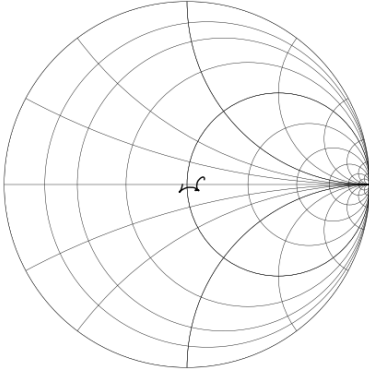
Ant to Rx



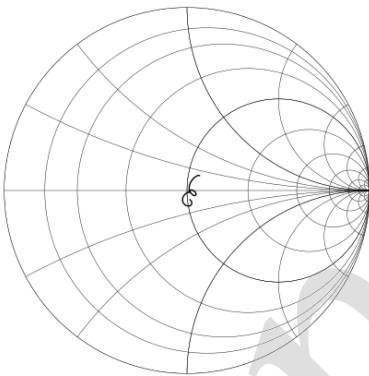
Electrical Characteristics

SATCOM Rx Single Filter

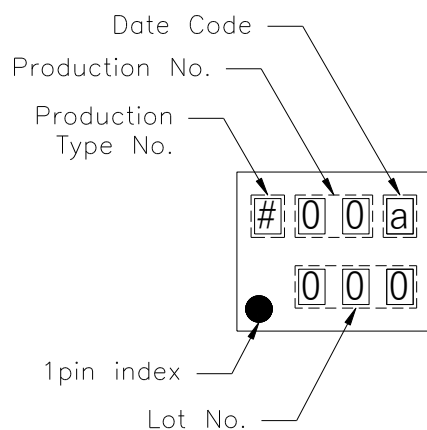
Ant Port Impedance



Rx Port Impedance



Marking Information



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

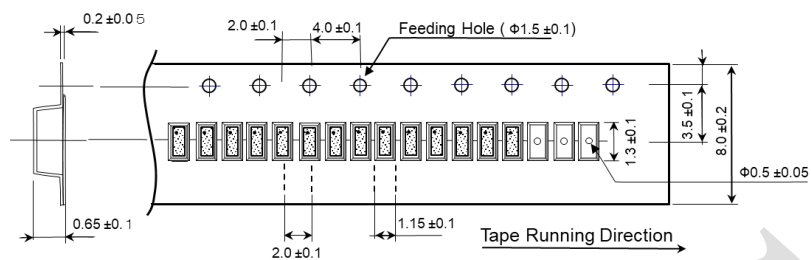
Product No. : 3Q

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

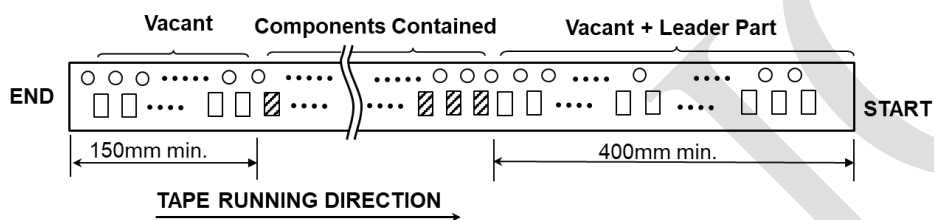
Product date code :

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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
2026	a	b	c	d	e	f	g	h	j	k	l	m

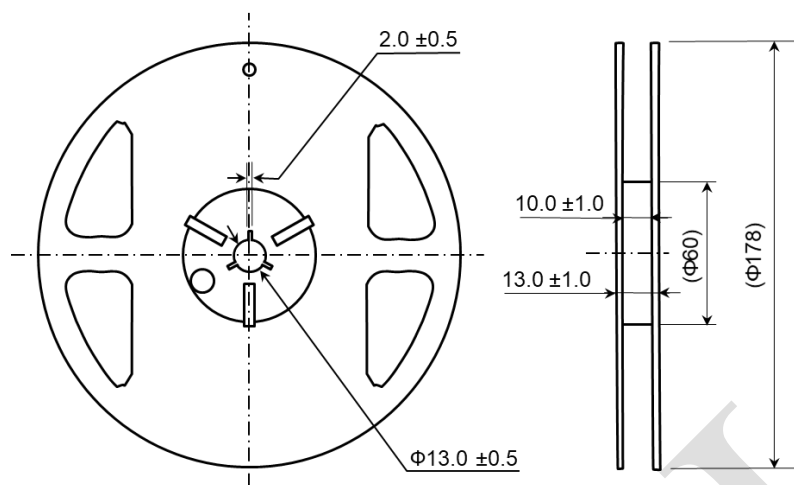
Tape Information



UNIT: mm



Reel Information



Φ178 Reel Dimension

UNIT: mm

Ordering Code

Part Number	Description
RAS2185A3Q-SA	Bulk (few pieces)
RAS2185A3Q-MB	Tape & Reel 3,000 pcs/reel
RAS2185A3Q-MC	Tape & Reel 10,000 pcs/reel
RAS2185A3Q-SZ	EVB

Revision History

Revision	Date	Description
0.1	Feb. 13, 2023	● Initial release
		●
		●

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