

Datasheet of SAW Filter

1109 ISM 2.4GHz

co-ext. B7/B40/B41

AEC-Q200 Grade 2

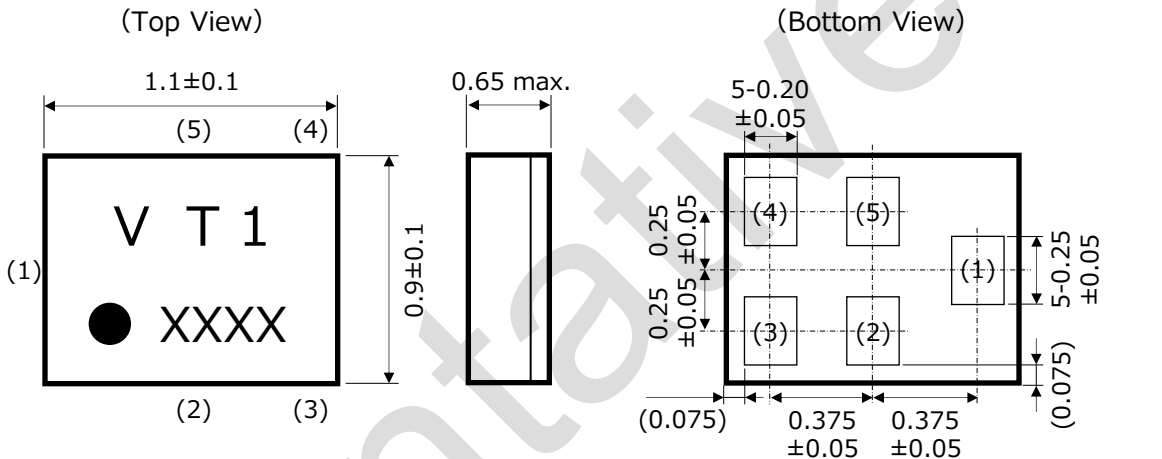
KYOCERA Part No. : VF11-2442M5UUA1

< Note > This specification may be subject to change.

Rating

Items	Rating	Unit	Note
Operating Temperature Range	-40 to 105	deg.C	
Storage Temperature Range	-40 to 105	deg.C	
Max Input Power	Input port	25	5,000Hours,CW,Ta=50deg.C
ESD Level	Human Body Model	100	Complied to JESD22-A114
Input Port Nominal Impedance	50 //7.5nH	ohm	Unbalance
Output Port Nominal Impedance	50 //20nH	ohm	Unbalance
AEC-Q200	Grade2		Complied to AEC-Q200

Dimensions

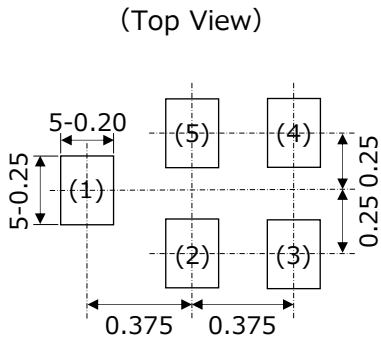


- V : Identification mark
- T1 : Identification no.
- : Index mark of pin 1
- XXXX : Production code

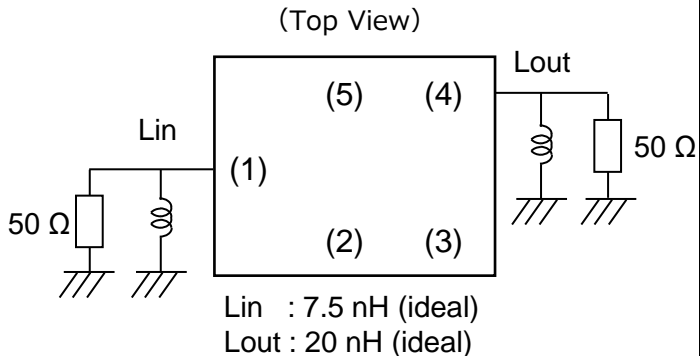
Unit : mm

Pin No.	Function
(1)	Input (TRx)
(4)	Output (Ant)
Others	GND

Recommendable Land Pattern



Measurement Circuit



< Note > This specification may be subject to change.

Electrical Characteristics

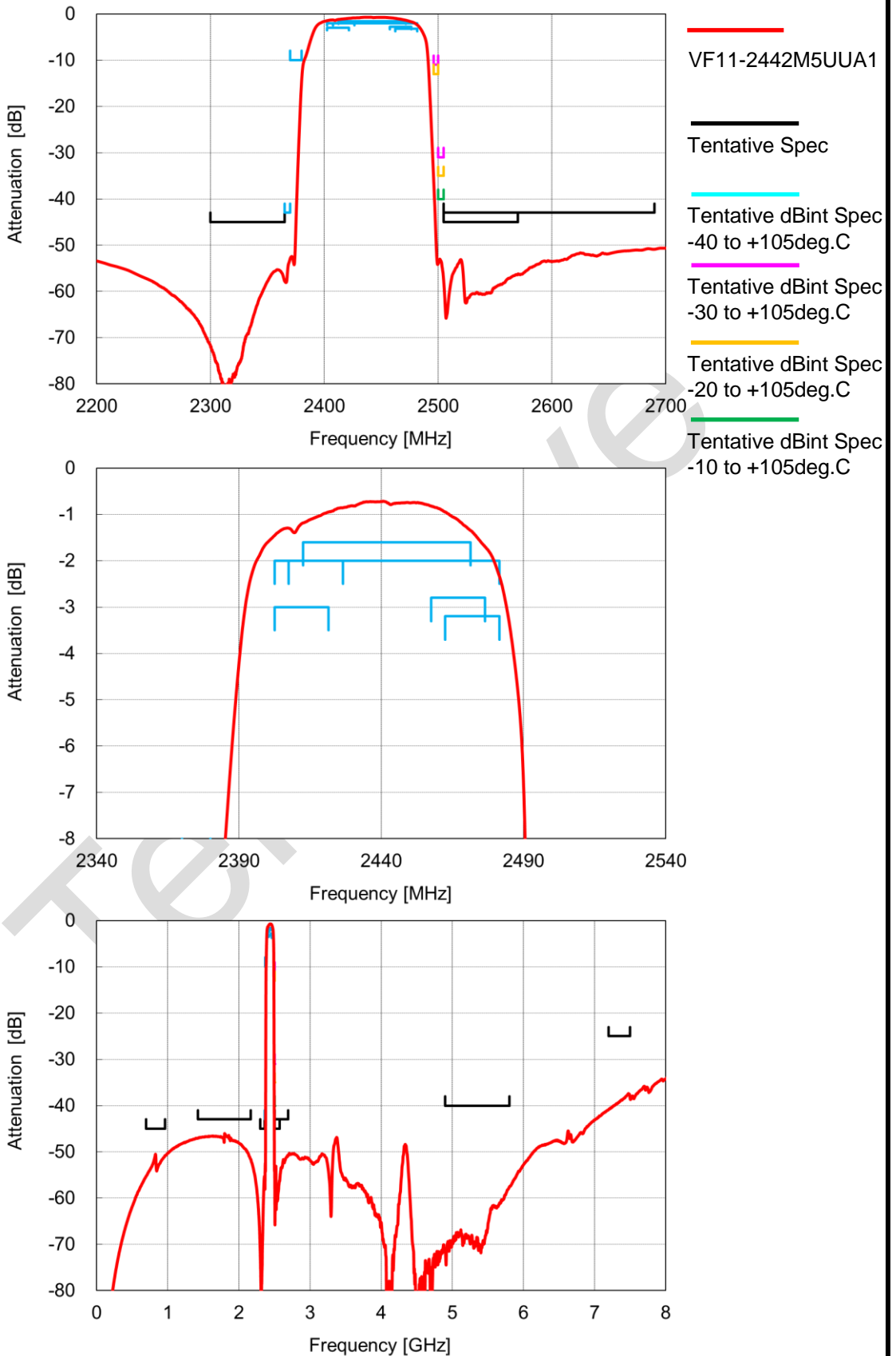
Items	Frequency [MHz]	Unit	Kyocera Tentative Spec.			Note
			min.	typ.	max.	
Integrated Insertion Loss	2402.5 to 2421.5	dBint	-	1.2	3.0	(※1), CH1
	2407.5 to 2426.5	dBint	-	1.1	2.0	(※1), CH2
	2412.5 to 2471.5	dBint	-	1.0	1.6	(※1), CH3 to 11
	2457.5 to 2476.5	dBint	-	1.1	2.8	(※1), CH12
	2462.5 to 2481.5	dBint	-	1.4	3.2	(※1), CH13
	2402.5 to 2481.5	dBint	-	1.4	2.0	(※1), +25°C
Ripple	2402.5 to 2481.5	dB	-	1.5	3.5	Any19MHz
Input VSWR	2402.5 to 2481.5		-	1.5	2.2	
Output VSWR	2402.5 to 2481.5		-	1.5	2.2	
Attenuation	699 to 960	dB	45	50	-	
	1425 to 2170	dB	43	46	-	
	2300 to 2365	dB	45	56	-	B40
	2365 to 2370	dBint	43	56	-	B40(※2)
	2370 to 2380	dBint	10	23	-	B40(※2)
	2496 to 2500	dBint	11	45	-	B41(※2), -30 to +105°C
	2496 to 2500	dBint	13	45	-	B41(※2), -20 to +105°C
	2500 to 2505	dBint	31	54	-	B41(※2), -30 to +105°C
	2500 to 2505	dBint	35	54	-	B41(※2), -20 to +105°C
	2500 to 2505	dBint	40	54	-	B41/7(※2), -10 to +105°C
	2505 to 2570	dB	45	53	-	B41/7
	2505 to 2690	dB	43	51	-	B41/7
4900 to 5805	dB	40	59	-		
7200 to 7500	dB	25	38	-		

(*1)Integrated Insertion Loss over 19MHz

(*2)Integrated Attenuation over 5MHz

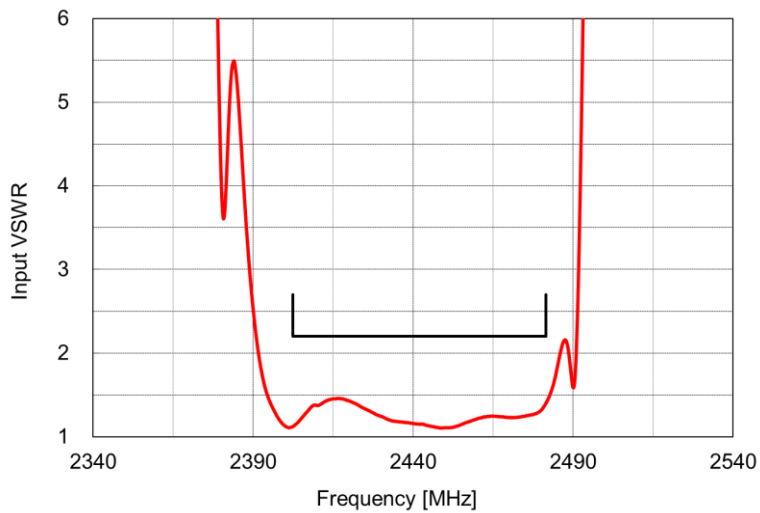
< Note > This specification may be subject to change.

Electrical Characteristics

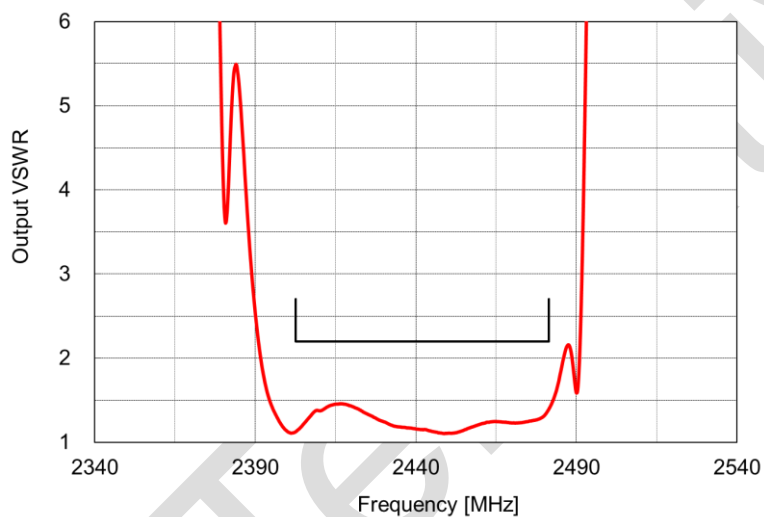
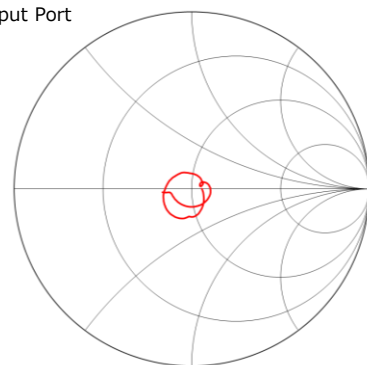


< Note > This specification may be subject to change.

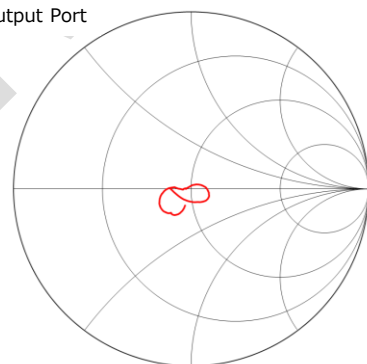
Electrical Characteristics



Input Port



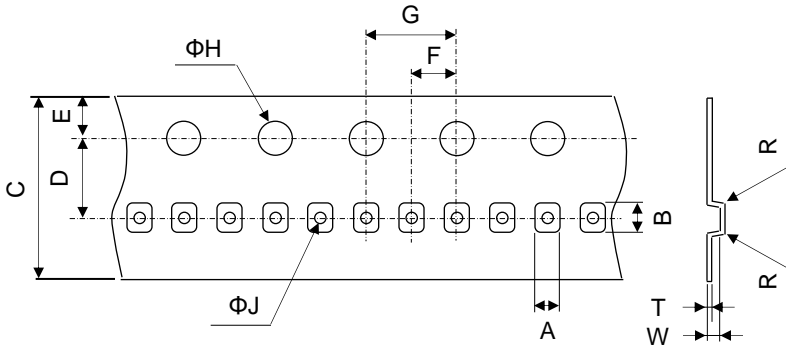
Output Port



< Note > This specification may be subject to change.

Tape & Reel Specification

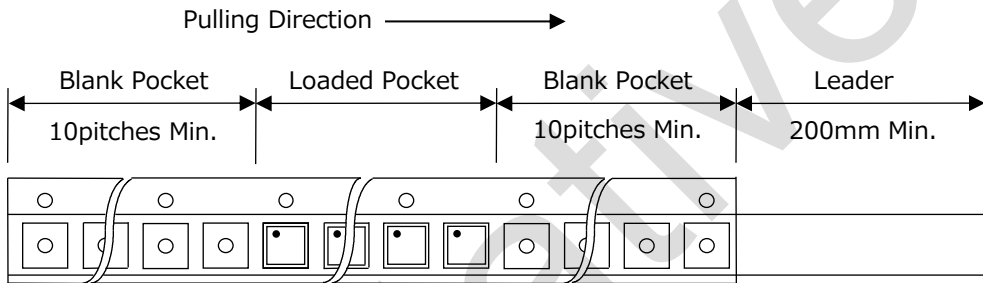
[Tape]



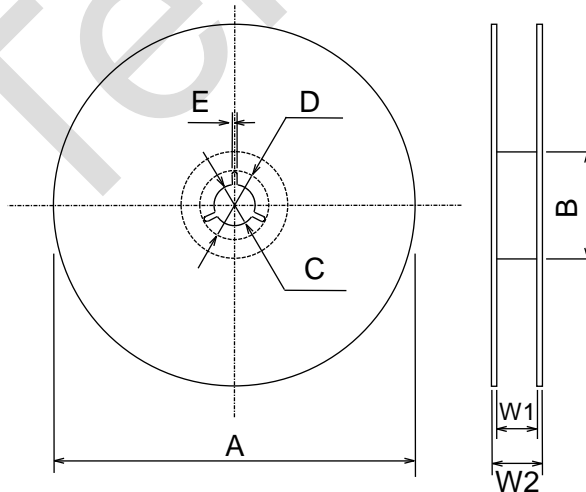
Unit : mm

Part	Dimension
A	1.1±0.05
B	1.3±0.05
C	8.0±0.1
D	3.5±0.05
E	1.75±0.1
F	2.0±0.05
G	4.0±0.05
φH	1.5+0.1/-0
φJ	0.50±0.05
R	0.1 Max
W	0.60±0.05
T	0.20+0.03/-0.02

W : Dimension is depth of pockets.



[Reel]



Part	A	B	C	D	Unit : mm
Dimension	180 +0/-1.5	60 +1.0/-0	13 ±0.2	21 ±0.8	
Part	E	W1	W2		
Dimension	2 ±0.5	9.0 +1.0/-0	11.4 ±1.0		

< Note > This specification may be subject to change.

Notice

1. Characteristics described in this datasheet are for references specifications shall be based on written documents agreed by each party.
2. Contents in this datasheet are subject to change without notice. It is recommended to confirm the latest information at the time of usage. Also, this datasheet is revised once a year. We may not be able to accept requests based on old datasheets.
3. Products in this datasheet are intended to be used in general electronic equipment such as office equipment, audio and visual equipment, communication equipment, measurement instrument and home appliances. It is absolutely recommended to consult with our sales representatives in advance upon planning to use our products in applications which require extremely high quality and reliability such as aircraft and aerospace equipment, traffic systems, safety systems, power plant and medical equipment including life maintenance systems.
4. Even though we strive for improvements of quality and reliability of products, it is requested to design with enough safety margin in equipment or systems in order not to threaten human lives directly or damage human bodies or properties by an accidental result of products.
5. It is requested to design based on guaranteed specifications for such as maximum ratings, operating voltage and operating temperature. It is not the scope of our guarantee for unsatisfactory results due to misuse or inadequate usage of products in the datasheet.
6. Operation summaries and circuit examples in this datasheet are intended to explain typical operation and usage of the product. It is recommended to perform circuit and assembly design considering surrounding conditions upon using products in this datasheet.
7. Technical information described in this datasheet is meant to explain typical operations and applications of products, and it is not intended to guarantee or license intellectual properties or other industrial rights of the third party or Kyocera.
8. Trademarks, logos and brand names used in this datasheet are owned by Kyocera or the corresponding third party.
9. Certain products in this datasheet are subject to the Foreign Exchange and Foreign Trade Control Act of Japan, and require the license from Japanese Government upon exporting the restricted products and technical information under the law. Besides, it is requested not to use products and technical information in the datasheet for the development and/or manufacture of weapons of mass destruction or other conventional weapons, nor to provide them to any third party with the possibility of having such purposes.
10. It is prohibited to reprint and reproduce a part or whole of this datasheet without permission.

< Note > This specification may be subject to change.