Document No. : SXC12518-00

KYOCERA SAW Filter

– RF filter for SDARS –

Type Name : VF11-2332M5UBA1

Aug., 21, 2024

KYOCERA Corporation

Corporate Electronic Components Group

Electronic Devices Division

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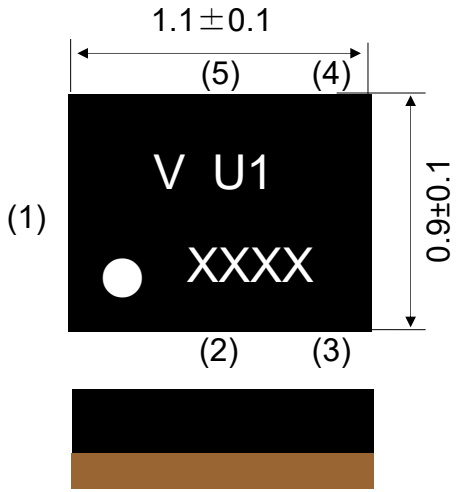
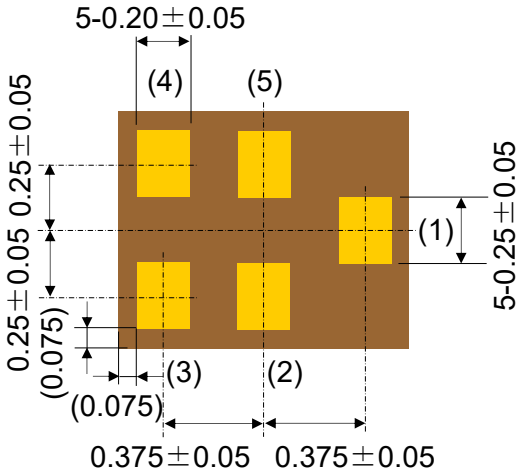
Dimensions & Test Circuit of SAW Filter

Dimensions

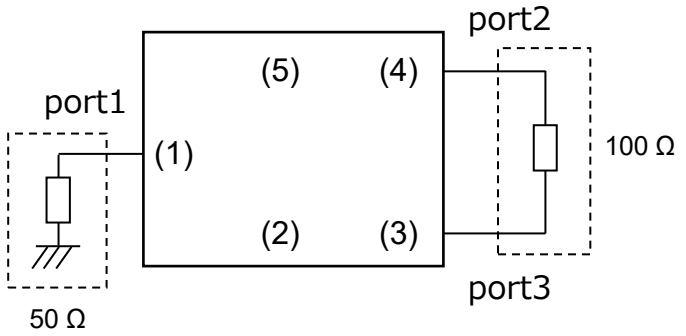
(Top View)



(Bottom View)



Test Circuit



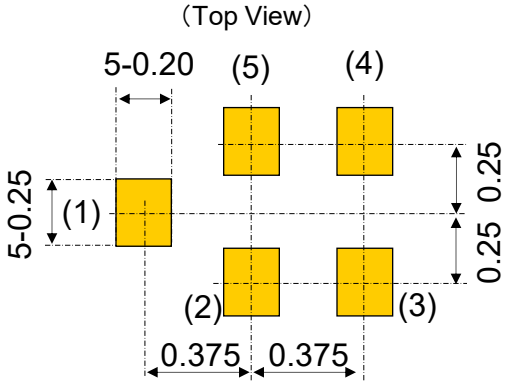
Each port
Port extension(Time) : 100ps
Port extension(Loss) : 0.165dB

Unit : mm
V : Identification mark
U1 : Identification no.
● : Index mark of pin 1
XXXX : Production code

Pin allocation

Pin No.	Function
(1)	Input
(2)	GND
(3)	Output
(4)	Output
(5)	GND

Recommendable Land Pattern



Unit : mm
: Electrode
Substrate Material : FR4

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Rating

Items		Rating	Unit	Note
Operating Temperature Range		-40 to +125	deg.C	
Storage Temperature Range		-40 to +125	deg.C	
Max Input Power In Band		+10	dBm	5,000Hours,Ta=50deg.C ,CW
DC Voltage		0	dBm	*1)
ESD Level	Human Body Model	100	Volt	Complied to JESD22-A114
Moisture Sensitivity Level		2a		Complied to J-STD-033B.1
Nominal Input Impedance		50	ohm	Unbalance
Nominal output Impedance		100	ohm	Balance
AEC-Q200		Grade1		Complied to AEC-Q200

*1) When DC voltage is applied, a blocking capacitor is required.

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Characteristic table

Items	Frequency (MHz)			Unit	VF11-2332M5UBA1 Specification. Aug., 21, 2024			Note
					min.	typ.	max.	
Minimum Insertion Loss (α_{min})	2315	to	2350	dB	-	1.1	-	
Maximum Insertion Loss	2315	to	2350	dB	-	1.2	2.2	-20deg.C to +85deg.C
	2315	to	2350	dB	-	1.2	2.4	
Ripple	2315	to	2350	dB	-	0.1	1.6	
Input VSWR	2315	to	2350	-	-	1.4	2.0	
Output VSWR	2315	to	2350	-	-	1.4	2.0	
Common Mode Rejection Ratio	2315	to	2350	dB	20	25	-	-20deg.C to +85deg.C
	2315	to	2350	dB	18	25	-	
Group Delay Ripple	2315	to	2350	ns	-	3	15	
Attenuation (Relative to α_{min})	88	to	880	dB	50	53	-	The value is difference between Absolute Attenuation and Minimum Insertion Loss. (= Absolute Attenuation - α_{min})
	880	to	1710	dB	40	48	-	
	1710	to	1910	dB	40	46	-	
	1910	to	2090	dB	35	47	-	
	2090	to	2190	dB	35	46	-	
	2190	to	2250	dB	30	43	-	
	2250	to	2275	dB	15	31	-	
	2400	to	2425	dB	15	27	-	
	2425	to	2500	dB	30	34	-	
	2500	to	2600	dB	35	43	-	
	2600	to	2800	dB	40	49	-	
	2800	to	3000	dB	40	47	-	
	3000	to	4000	dB	30	42	-	
	4000	to	4800	dB	30	50	-	
	4800	to	6000	dB	25	51	-	
Temperature range for specification				deg.C	-40 to +105			
Impedance	Input Port			ohm	50			
	Output Port			ohm	100			
Size (Length x Width)				mm	1.1 x 0.9			
Size (Thickness)				mm	0.55 max			

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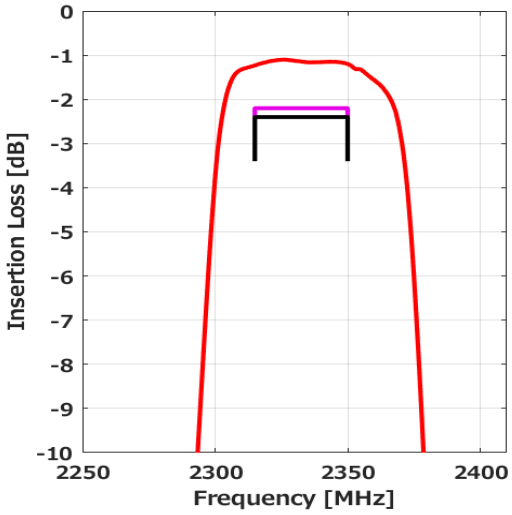
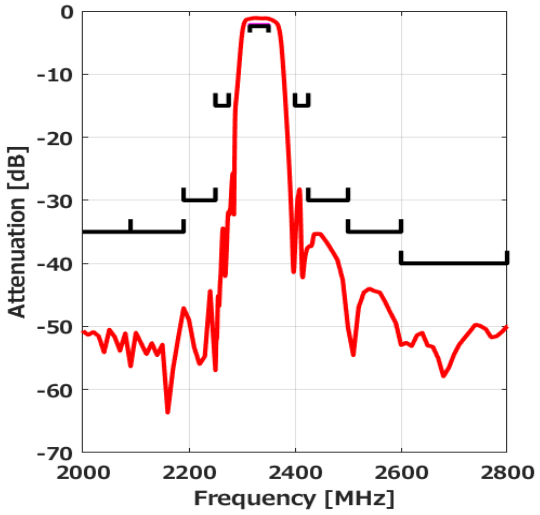
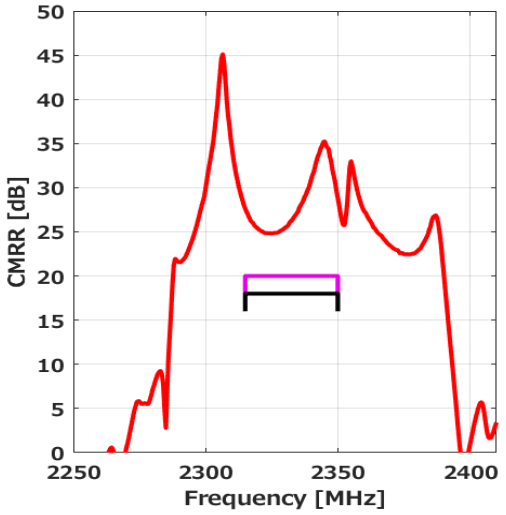
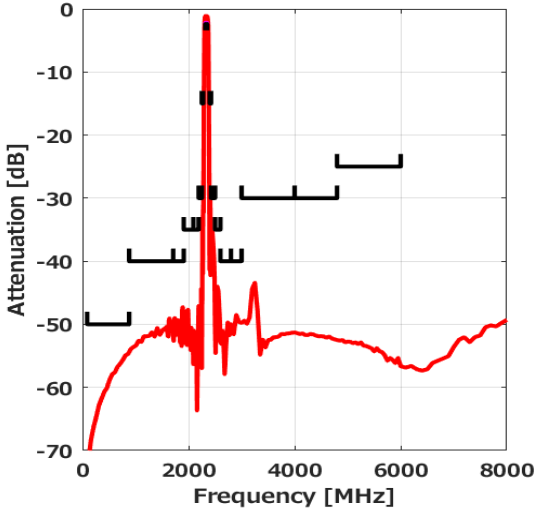
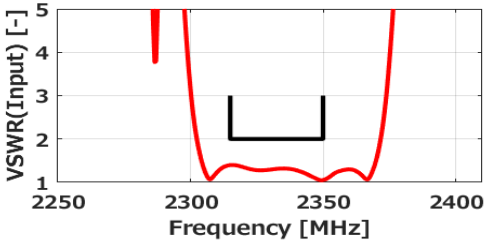
Typical Curve Data

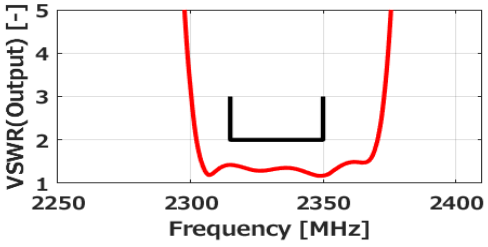


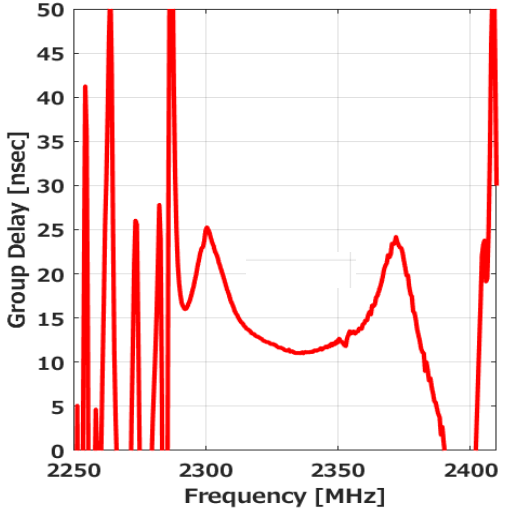












VF11-2332M5UBA1
Typical Curve Data

Specification
-40 to +105 deg.C

Specification
-20 to +85 deg.C

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