

# Datasheet of SAW Filter

## 1109 SDARS

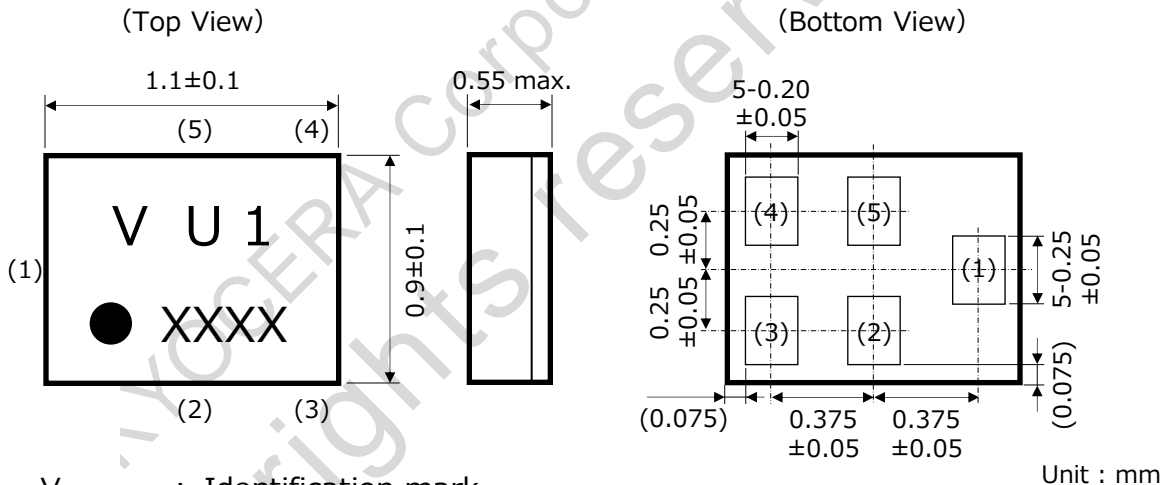
KYOCERA Part No. : VF11-2332M5UBA1

### 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.

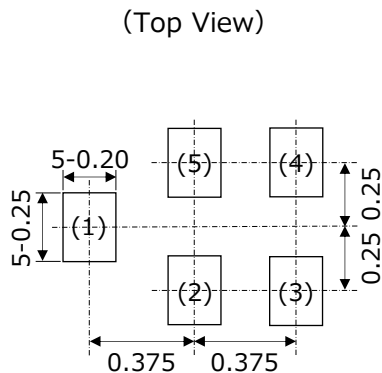
### Dimensions



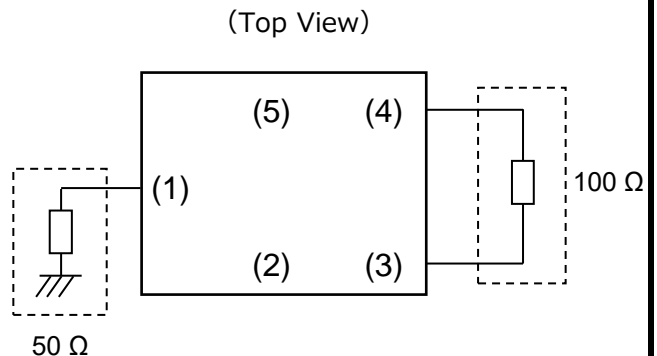
- V : Identification mark
- U1 : Identification no.
- : Index mark of pin 1
- XXXX : Production code

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

### Recommendable Land Pattern



### Measurement Circuit



## Electrical Characteristics

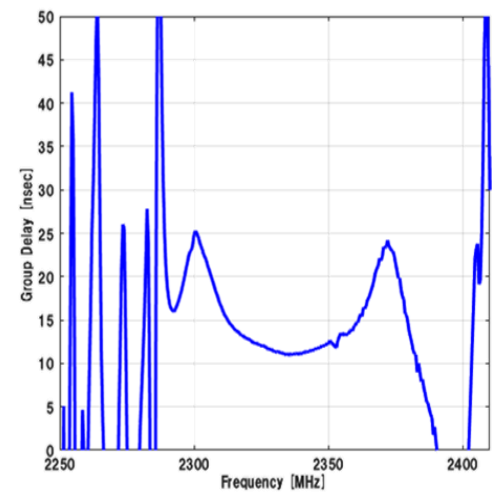
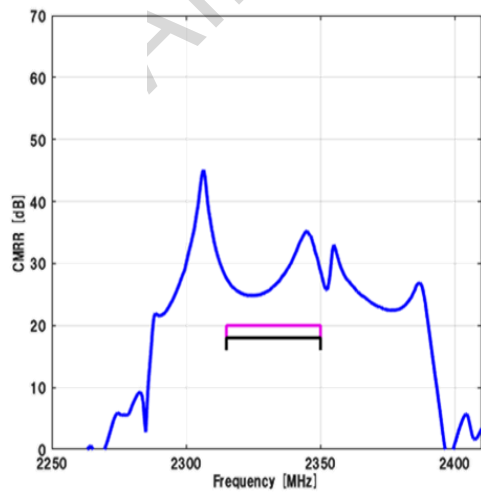
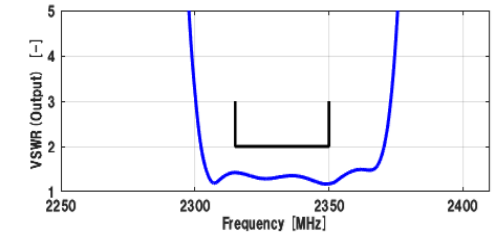
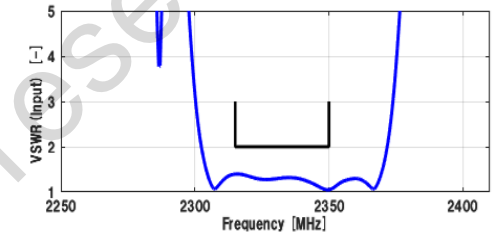
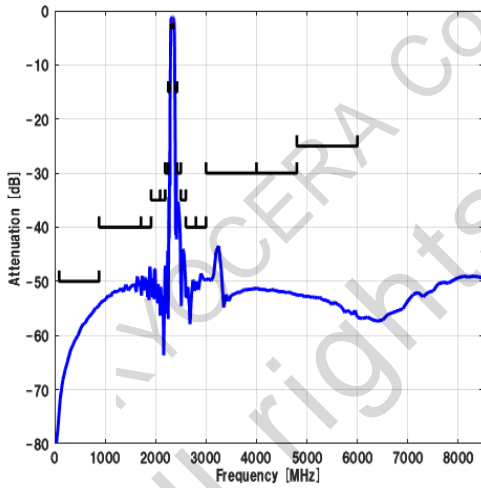
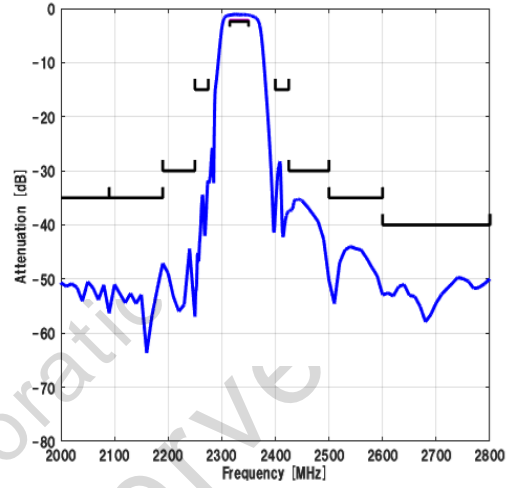
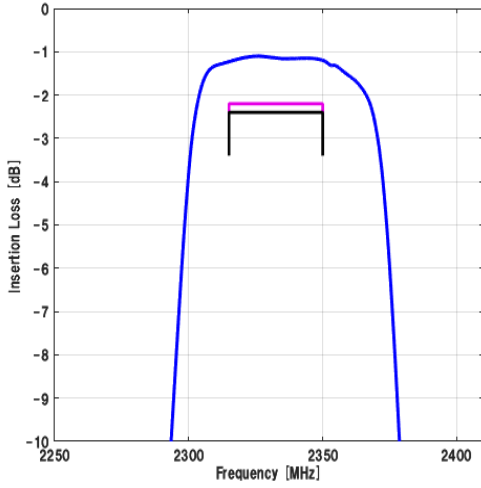
Items	Frequency (MHz)		Unit	VF11-2332M5UBA1 Specification. Aug., 21, 2024			Note
				min.	typ.	max.	
Minimum Insertion Loss ( $\alpha_{\min}$ )	2315	to 2350	dB	-	1.1	-	
Maximum Insertion Loss	2315	to 2350	dB	-	1.2	2.2	-20deg.C to +85deg.C
	2315	to 2350	dB	-	1.2	2.4	
Ripple	2315	to 2350	dB	-	0.1	1.6	
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 $\alpha_{\min}$ )	88	to 880	dB	50	53	-	The value is difference between Absolute Attenuation and Minimum Insertion Loss. ( = Absolute Attenuation - $\alpha_{\min}$ )
	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			

## Electrical Characteristics

**VF11-2332M5UBA1**  
Typical Curve Data

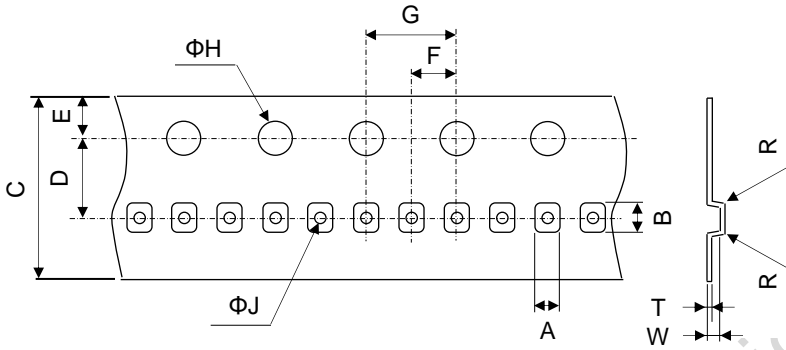
Specification  
-40 to +105 deg.C

Specification  
-20 to +85 deg.C



### Tape & Reel Specification

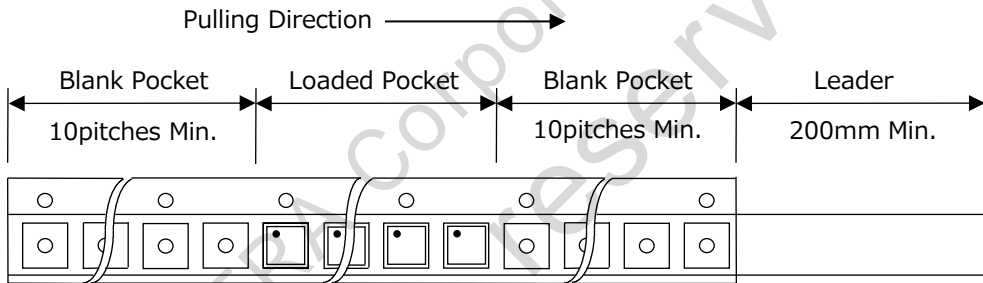
#### [Tape]



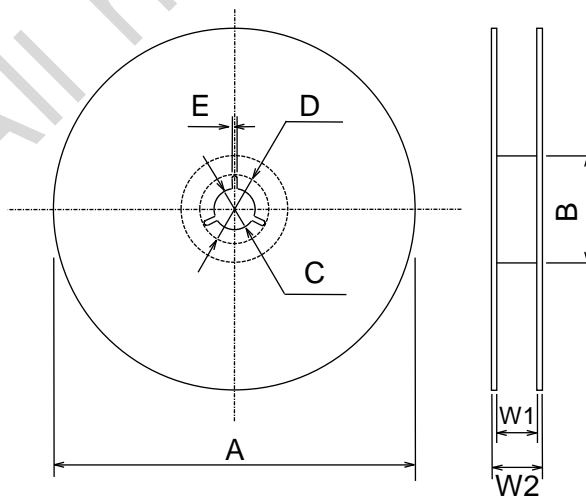
Unit : mm

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		

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