



# ANATECH ELECTRONICS, INC.

Manufacturer of RF & Microwave Products



## 413-423 MHz Saw Duplexer

P/N: AM413-423SD332

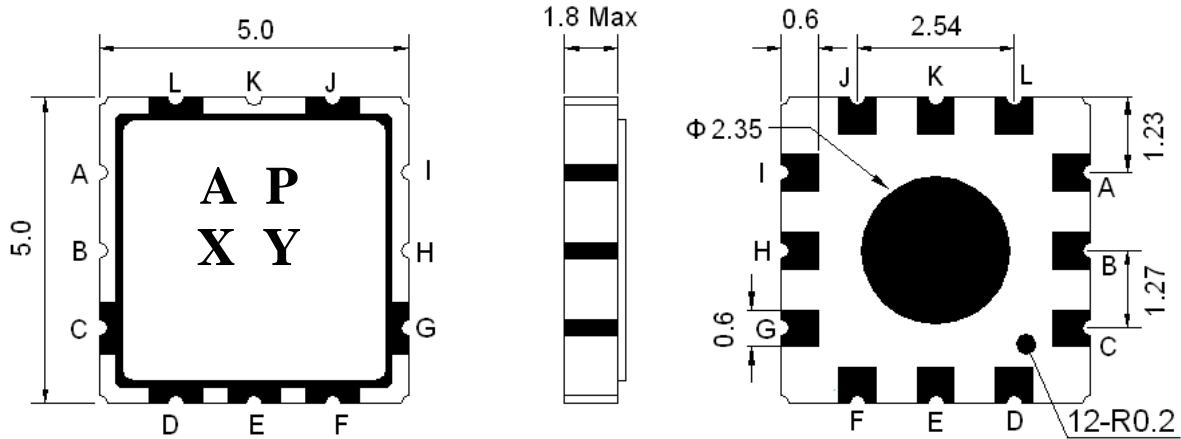
Tx → Ant		Specifications		
Parameters Description	Condition [MHz]	Minimum	Typical	Maximum
Insertion Loss	411.6 ~ 415.9	-	2.5 dB	2.8 dB
VSWR	411.6 ~ 415.9	-	1.6	2.1 dB
Absolute Attenuation	0.3 ~ 400	23 dB	26 dB	-
	421.6 ~ 425.9	30 dB	50 dB	-
	425.9 ~ 1700.0	23 dB	27 dB	-
	1700.0 ~ 2000.0	10 dB	17 dB	-
Ant → Rx		Specifications		
Parameters Description	Condition [MHz]	Minimum	Typical	Maximum
Insertion Loss	421.6 ~ 425.9	-	3.2 dB	4.3
VSWR	421.6 ~ 425.9	-	1.5	2.2
Absolute Attenuation	0.3 ~ 411.6	20 dB	24 dB	-
	442 ~ 415.9	33 dB	51 dB	-
	442 ~ 600	20 dB	27 dB	-
	600.0 ~ 1200.0	20 dB	28 dB	-
	1200.0 ~ 2000.0	25 dB	43 dB	-
Tx → Rx		Specifications		
Parameters Description	Condition [MHz]	Minimum	Typical	Maximum
Isolation	411.6 ~ 415.9	35 dB	50 dB	-
	421.6 ~ 425.9	32 dB	55 dB	-
Parameters Description		Minimum	Typical	Maximum
Operation Temperature Range		-30°C	-	+80°C
Storage Temperature Range		-40°C	-	+85°C
Maximum DC Voltage		0 V		
Maximum Input Power		1.0 W > 50000 Hours, CW tone(Ta= +50°C) W		
Input Impedance		50Ω		
Output Impedance		50Ω		
Package type & size		K2		
Length x Width		5.0 x 5.0 mm <sup>2</sup>		
Height		1.8 mm		



**413-423 MHz Saw Duplexer**

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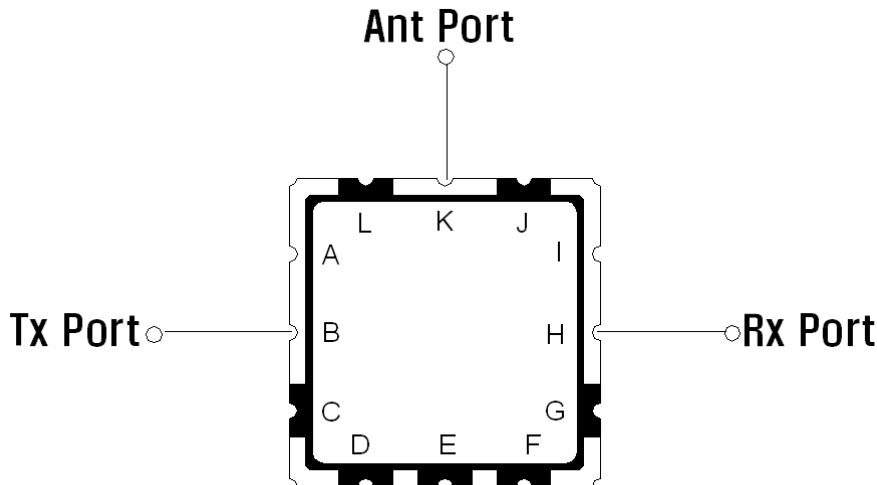
**Package Dimensions:**



Marking Descriptions	
A	Application
P	Series Number
X	Date Code(Year)
Y	Date Code(Month)

Pin Description	
A, C, D, E, F, G, I, J, L	Ground
H	Receiver
K	Antenna
B	Transmitter

**Testing Environment:**



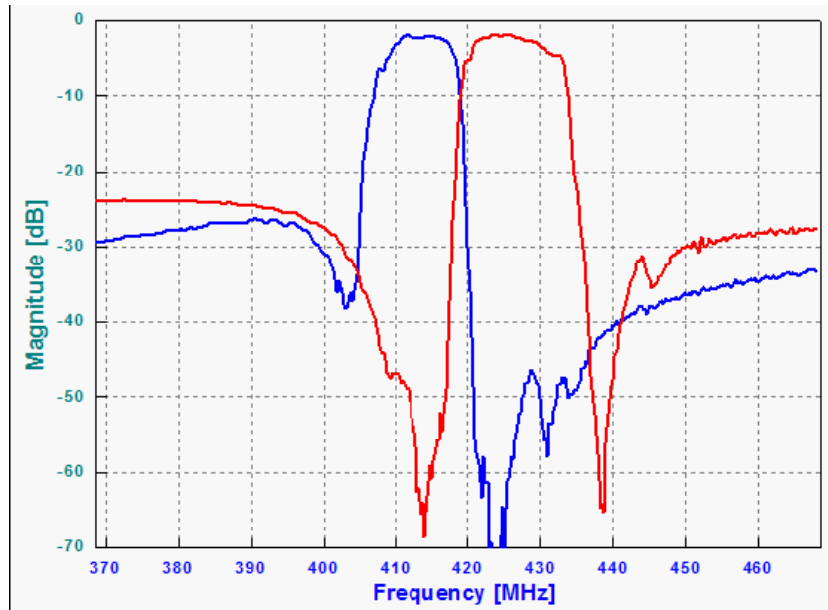


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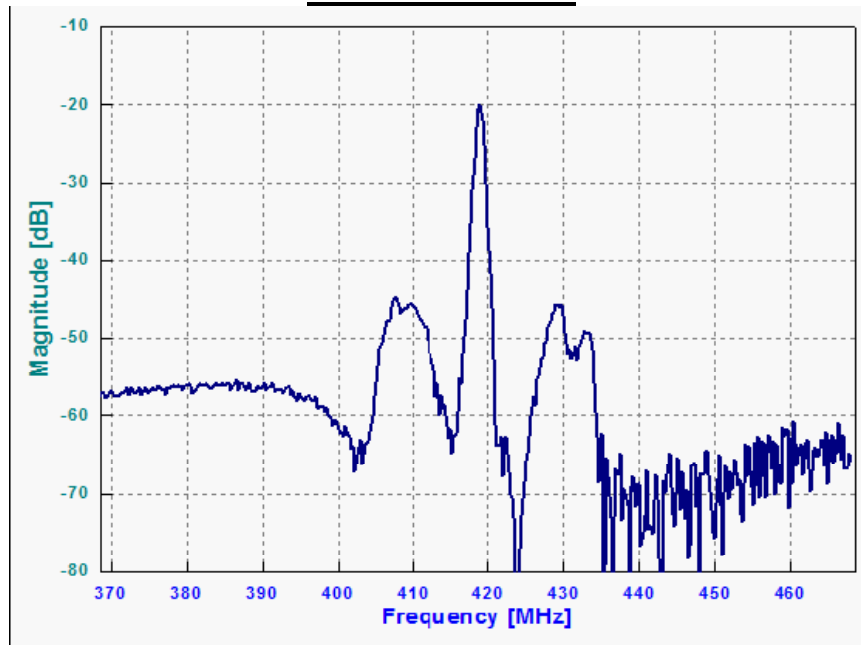
**P/N: AM413-423SD332**

**Frequency Characteristics:**

**Tx to Ant, Ant to Rx**



**Tx to Rx Isolation**



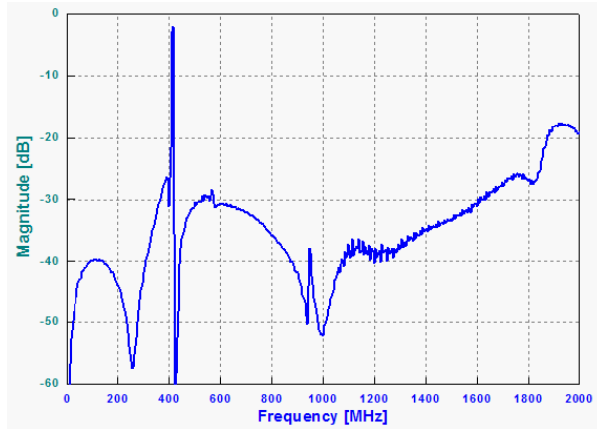


**413-423 MHz Saw Duplexer**

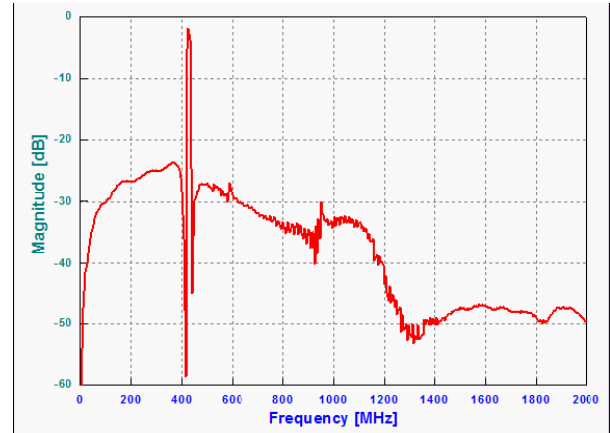
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**Frequency Characteristics:**

**Tx to Ant**

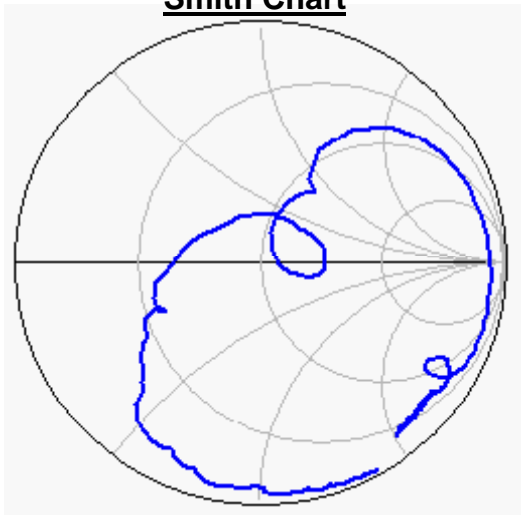


**Ant to Rx**

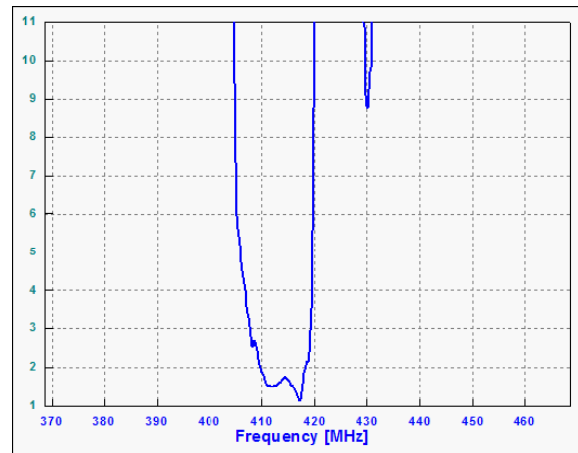


**Tx Port**

**Smith Chart**



**VSWR**





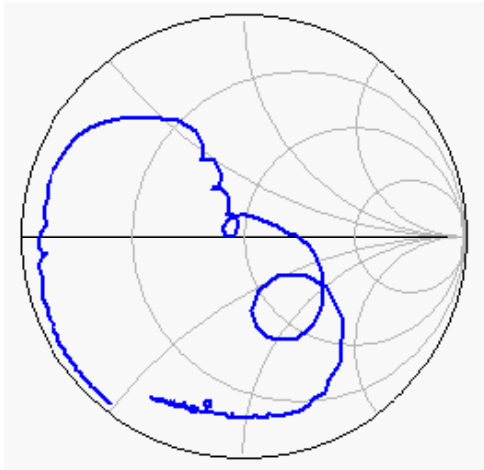
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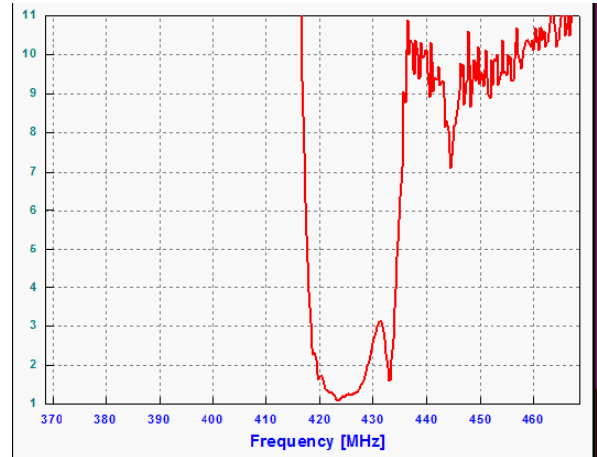
**Frequency Characteristics:**

**Rx Port**

**Smith Chart**

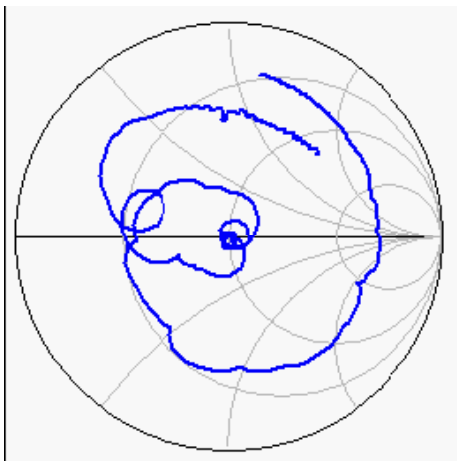


**VSWR**



**Ant Port**

**Smith Chart**



**VSWR**

