

# Coaxial Bandpass Filter

## VBF-2555+

50Ω 2500 to 2610 MHz

### Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	1.5W at 25°C

\*Passband rating, derate linearly to 0.25W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.

### Features

- Good VSWR, 1.6:1 Typ @ Passband
- Rugged uni-body construction, small size
- Temperature stable

### Applications

- Harmonic rejection
- Transmitters/receivers
- Lab use
- Test instrumentation



Generic photo used for illustration purposes only

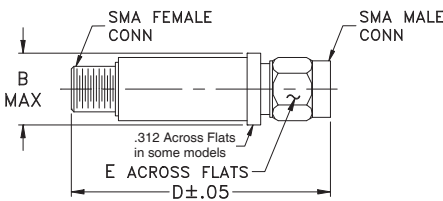
CASE STYLE: FF704

Connectors	Model
SMA	VBF-2555+

### +RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

### Outline Drawing



### Outline Dimensions (inch mm)

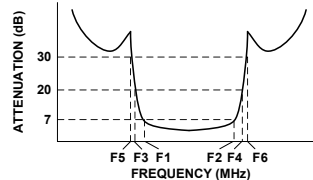
B	D	E	wt.
.410	1.43	.312	grams
10.41	36.32	7.92	10

Note: Please refer to case style drawing for details

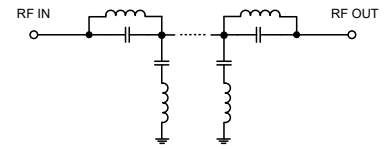
### Bandpass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

CENTER FREQ. (MHz)	PASSBAND (MHz) (Loss < 7dB)	STOPBANDS (MHz)				VSWR (:1)		
		Loss > 20dB		Loss 30dB Typ		Passband		Stopband
Fc	F1 - F2	F3	F4	F5	F6	Typ.	Max.	Typ.
2555	2500 - 2610	1970	3200	2000	3250 - 5500	1.6	2.8	20

### Typical Frequency Response

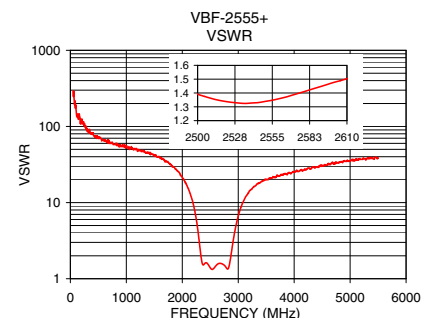
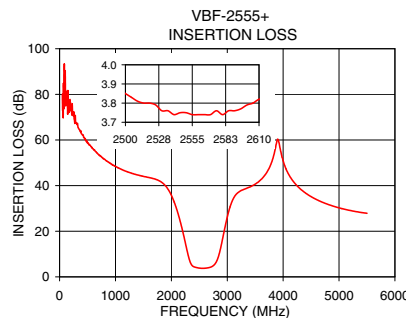


### Functional Schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	72.26	289.53
200	74.05	115.81
500	59.32	69.49
1000	48.65	54.29
1970	37.58	23.18
2000	36.10	21.46
2200	20.97	9.33
2300	10.44	3.23
2350	6.26	1.68
2500	3.77	1.39
2555	3.69	1.35
2610	3.78	1.50
2850	7.92	1.64
2920	14.90	3.49
3000	24.49	6.66
3200	37.30	14.15
3250	38.25	15.26
3700	46.50	22.87
4500	34.74	31.03
5500	27.76	38.61



### Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
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# Coaxial Band Pass Filter

# VBF-2555+

## Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)
50	72.26	0.06
200	74.05	0.15
500	59.32	0.25
1000	48.65	0.32
1970	37.58	0.75
2000	36.10	0.81
2200	20.97	1.87
2300	10.44	5.56
2350	6.26	11.95
2500	3.77	15.73
2555	3.69	16.59
2610	3.78	13.93
2850	7.92	12.33
2920	14.90	5.12
3000	24.49	2.63
3200	37.30	1.23
3250	38.25	1.14
3700	46.50	0.76
4500	34.74	0.56
5500	27.76	0.45

REV. X1  
VBF-2555+  
080221  
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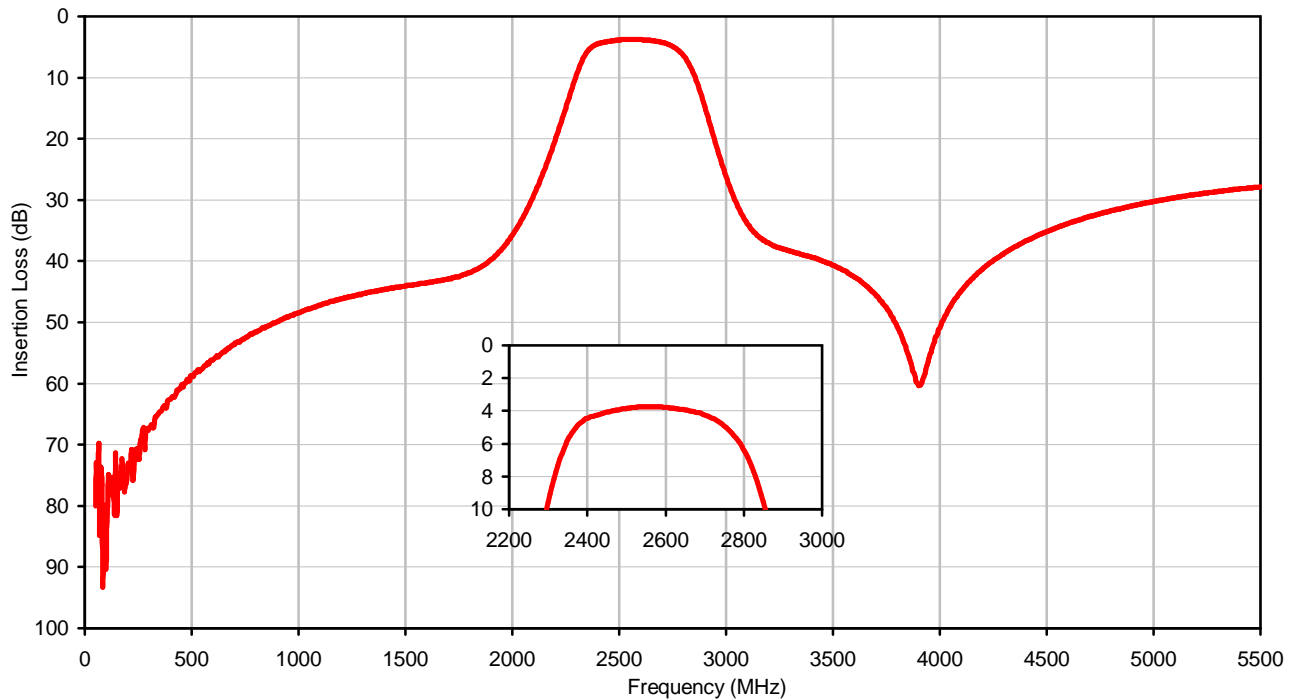


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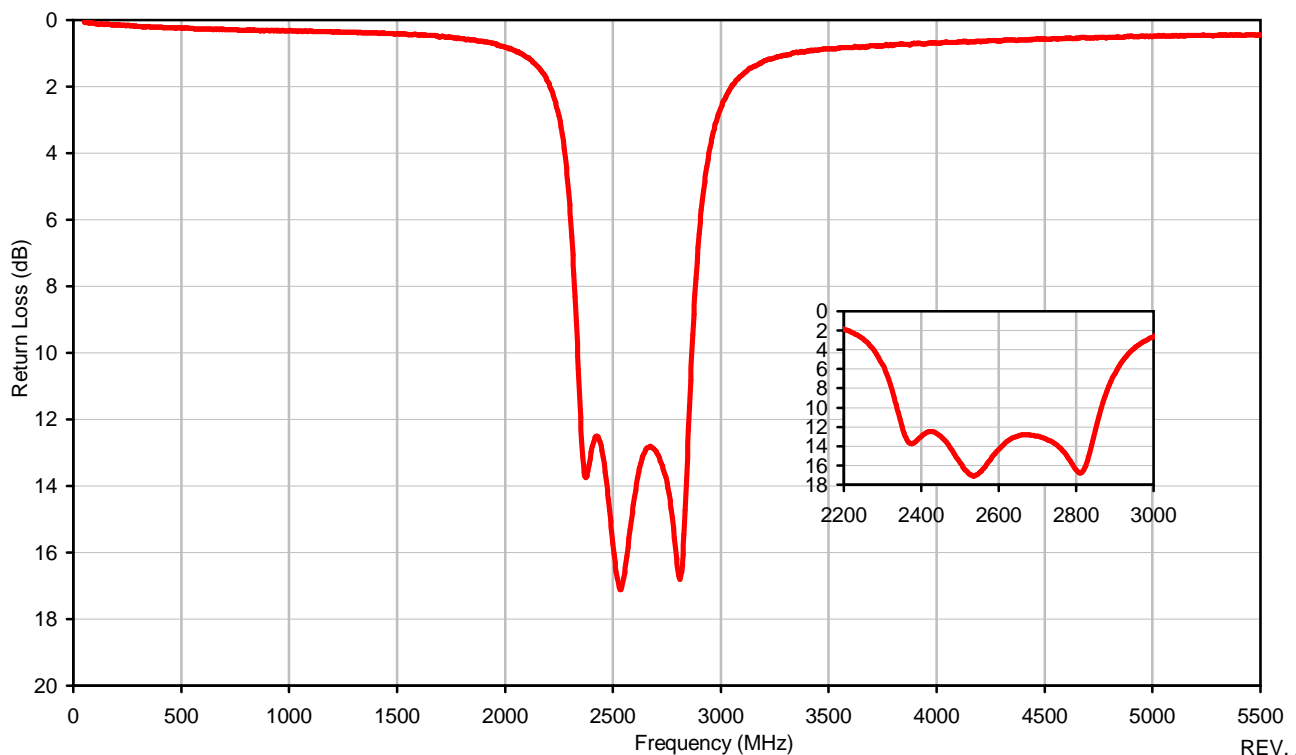


## Typical Performance Curves

### Insertion Loss



### Return Loss



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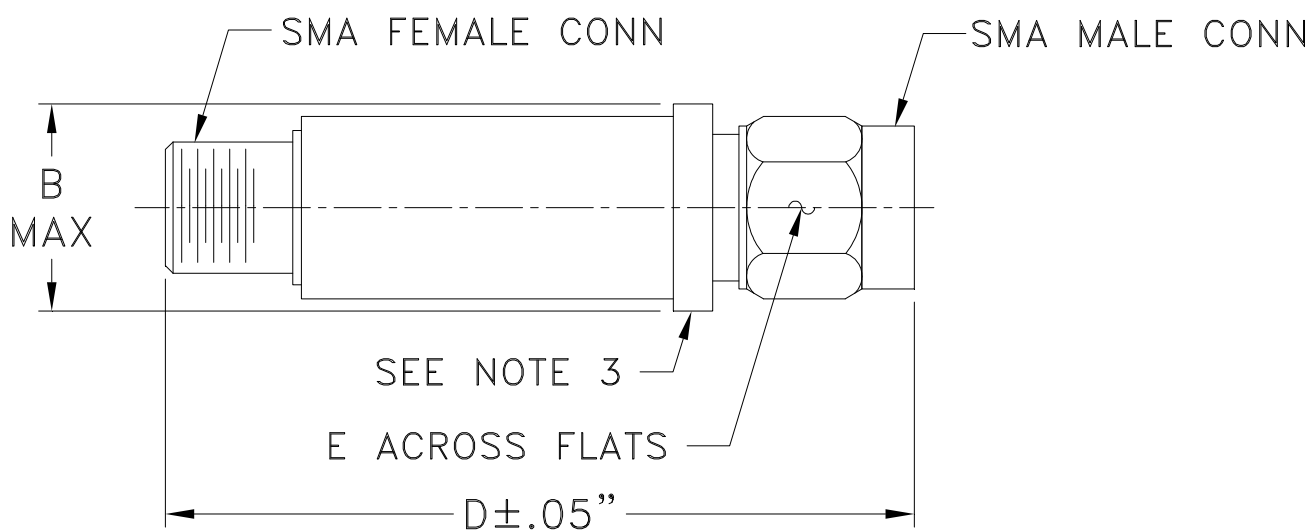


# Case Style

# FF

## FF704

### Outline Dimensions



CASE #.	A	B	C	D	E	WT GRAMS
FF704	--	.410 (10.41)	--	1.43 (36.32)	.312 (7.92)	10.0

Dimensions are in inches (mm). Tolerances: 2Pl. ± .04; 3Pl. ± .030

#### Notes:

1. Case material: Stainless steel.
2. Case finish: Gold plated.
3. Round Flange may have .312 Across Flats in some models.

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All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

<b>Specification</b>	<b>Test/Inspection Condition</b>	<b>Reference/Spec</b>
Operating Temperature	-55° to 100°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Barometric Pressure	100,000 Feet	MIL-STD-202, Method 105, Condition D
Humidity	90% RH, 65°C Units may require bake-out after humidity to restore full performance.	MIL-STD-202, Method 103
Thermal Shock	-65° to 125°C, 5 cycles	MIL-STD-202, Method 107, Condition B
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D
Mechanical Shock	100g, 6ms sawtooth, 3 shocks each direction 3 axes (total 18)	MIL-STD-202, Method 213, Condition I