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

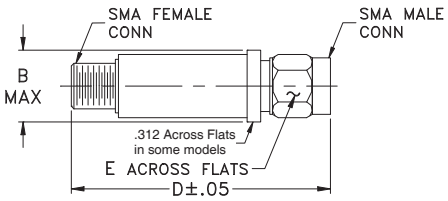
CASE STYLE: FF704

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)

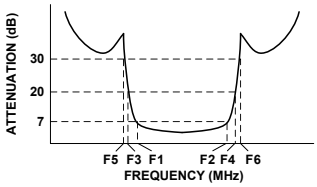
B	D	E	wt.
.410	1.43	.312	grams
10.41	36.32	7.92	10

Note: Please refer to case style drawing for details

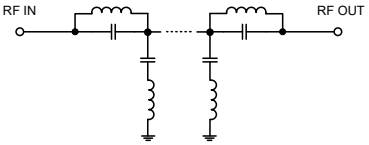
Bandpass Filter Electrical Specifications (T_{AMB}= 25°C)

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

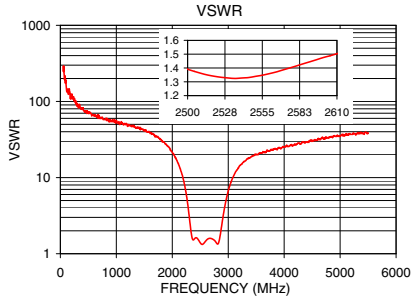


Typical Performance Data at 25°C

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

VBF-2555+
INSERTION LOSS

VBF-2555+
VSWR



Notes

A. 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.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

Coaxial Band Pass Filter VBF-2555+

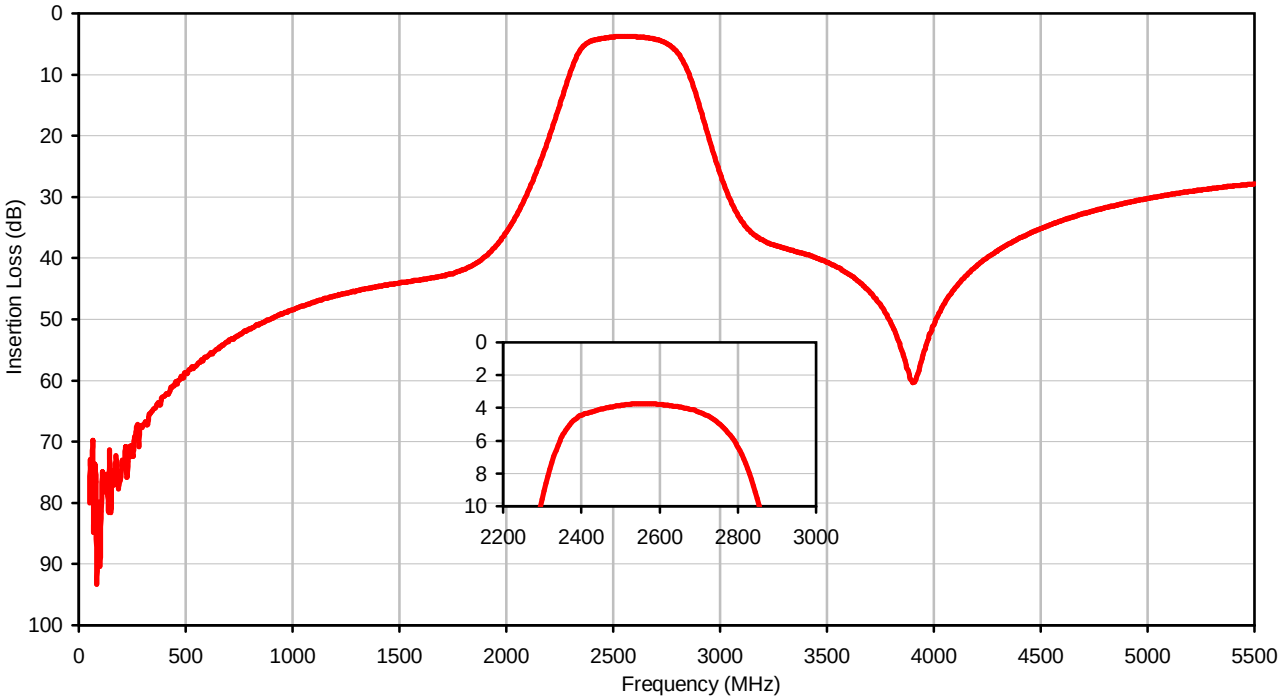
Typical Performance Data

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

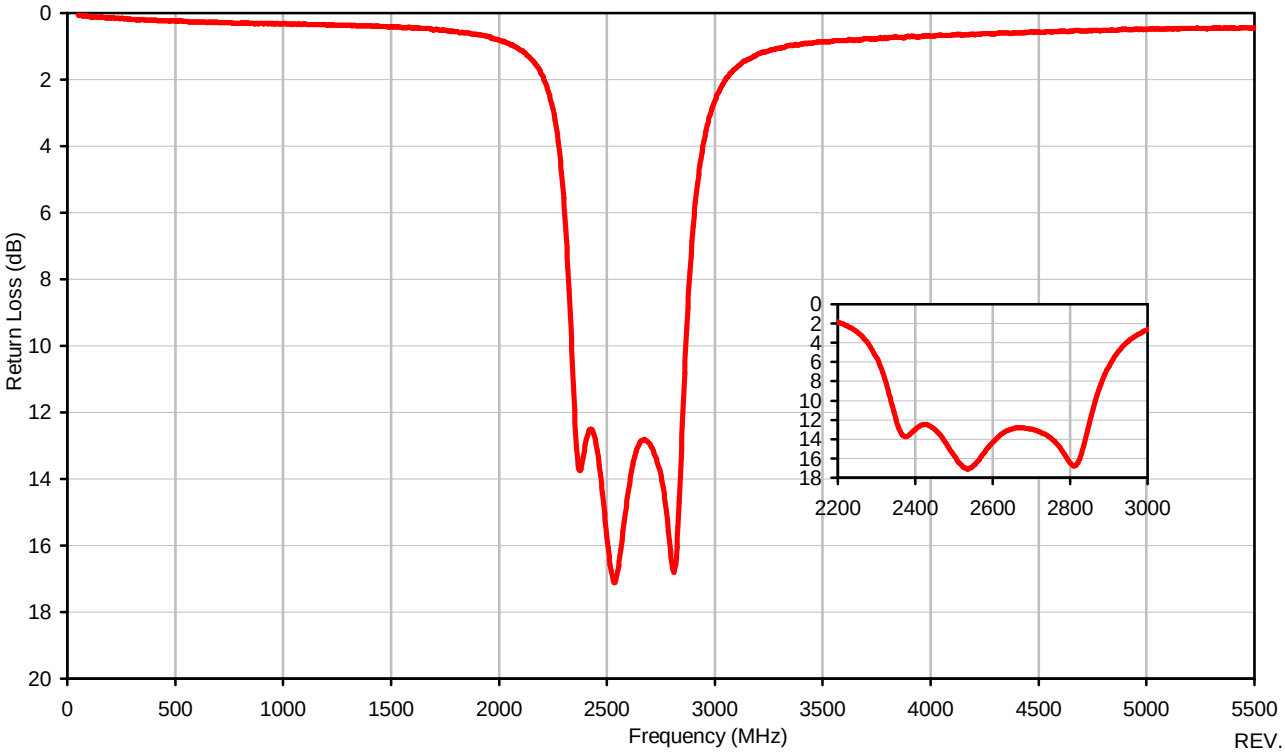
Coaxial Band Pass Filter VBF-2555+

Typical Performance Curves

Insertion Loss



Return Loss

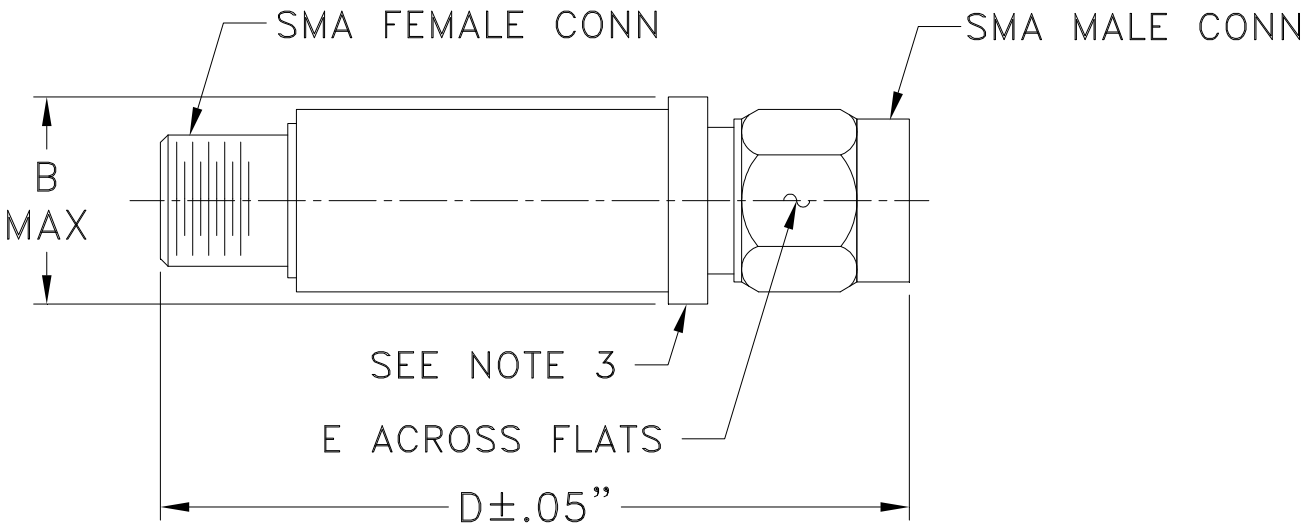


REV. X1
VBF-2555+
080221
Page 1 of 1

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.

Mini-Circuits

Environmental Specifications ENV28

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.

Specification	Test/Inspection Condition	Reference/Spec
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