

Bandpass Filter

ZX75BP-1842+

50Ω 1725 to 1960 MHz

The Big Deal

- Low Insertion Loss, 1.4 dB
- Excellent Rejection
1450 MHz, 2350 MHz, 30 dB
1350 MHz, 2560 MHz, 49 dB
- Rejection band extends to 7 GHz



CASE STYLE: HY1238

Product Overview

The Mini-Circuits ZX75BP-1842+ ceramic coaxial resonator based filter offers outstanding close-in rejection in the PCS/DCS communication band. Built using Mini-Circuits proven unibody construction which integrates the RF connectors with the case body, the ZX75BP-1842+ takes very little space, and includes a multi-section low pass filter to prevent second harmonic re-entry that is characteristic of typical ceramic resonator filters.

Key Features

Feature	Advantages
Outstanding close-in rejection	Using high Q ceramic resonators enables this filter to support applications where tight rejection performance is required.
Rejection band extended to 7 GHz	Integrated "clean up" low pass filter enables excellent rejection up to 7 GHz eliminates the need for additional external filters.
High Power Handling, 6W	Ability to withstand high power signals allows operation in many lab and integrated assembly applications, or for use in field applications as a quick-fix filter solution.
Excellent Temperature Stability	±0.35 dB insertion loss over the full temperature range.
Compact Versatile Case	Case Body: 1.2"x0.75"x0.46" With connectors and flanges: 2.05"x1.18"x0.46" Connectors: SMA Female (1), SMA Male (1)



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IF/RF MICROWAVE COMPONENTS

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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.

For detailed performance specs
& shopping online see web site

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Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	6W max. at 25°C

* Derate linearly to 3W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

Features

- Low Insertion loss, 1.4 dB typ.
- Minimal Insertion loss variation over temperature, ± 0.35 dB
- Sharp stop band rejection
- Protected by US Patent 6,790,049

Applications

- Harmonic & Sub-harmonic filtering
- Image rejection
- PCS/DCS

ZX75BP-1842+



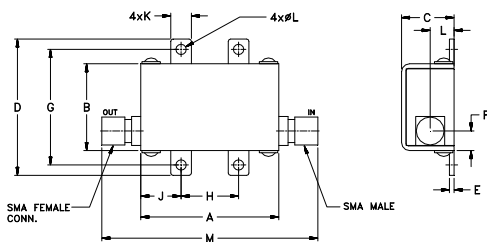
CASE STYLE: HY1238

SMA Connectors	Model	Price	Qty.
IN MALE OUT FEM	ZX75BP-1842-S+	\$59.95 ea.	(1-9)

+RoHS Compliant

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

Outline Drawing



Outline Dimensions (inch mm)

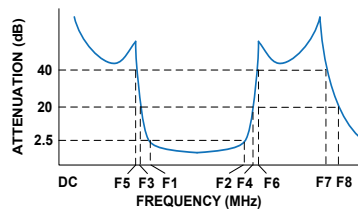
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1.20	.75	.46	1.18	.04	.17	1.00
30.48	19.05	11.68	29.97	1.02	4.32	25.40

H	J	K	L	M	wt
.50	.35	.18	.106	2.05	grams
12.70	8.89	4.57	2.69	52.07	35.00

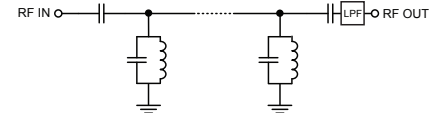
Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency		—	1842	—	MHz
	Insertion Loss	F1-F2	—	1.4	3.0	dB
	VSWR	F1-F2	—	—	2.0	:1
Stop Band, Lower	Insertion Loss	DC-F5	40	—	—	dB
		F5-F3	20	—	—	dB
	VSWR	DC-F3	—	30	—	:1
Stop Band, Upper	Insertion Loss	F4-F6	20	—	—	dB
		F6-F7	40	—	—	dB
		F7-F8	—	20	—	dB
	VSWR	F4-F8	—	10	—	:1

Typical Frequency Response

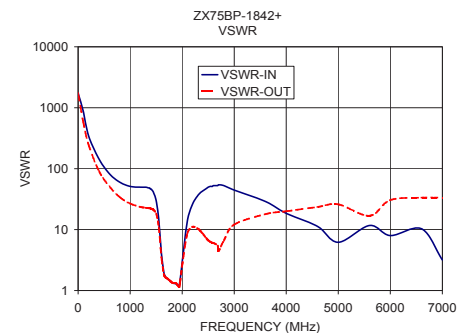
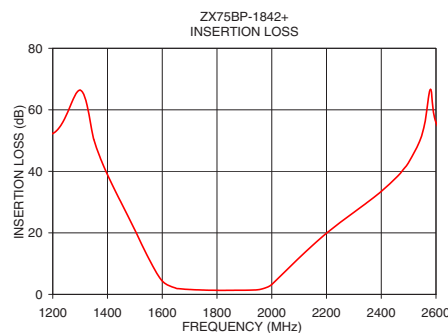
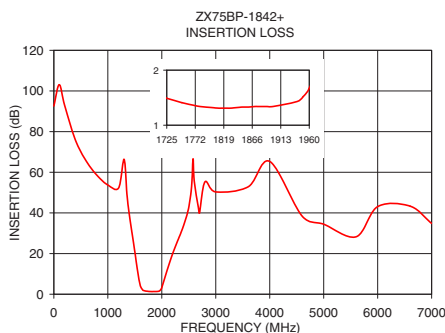


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR-IN (:1)	VSWR-OUT (:1)
0.30	92.61	1737.18	1737.18
500.00	70.30	102.19	66.82
1000.00	53.74	51.10	26.74
1350.00	50.38	48.26	22.58
1415.00	36.07	44.55	21.73
1450.00	29.80	40.41	20.95
1600.00	4.36	4.09	3.49
1725.00	1.49	1.54	1.55
1730.00	1.47	1.53	1.54
1842.00	1.32	1.31	1.34
1842.50	1.32	1.31	1.34
1960.00	1.67	1.49	1.37
1975.00	2.05	1.86	1.70
2015.00	4.24	3.94	3.34
2350.00	29.96	40.41	9.48
2480.00	40.52	48.26	6.94
2580.00	66.63	51.10	6.09
2600.00	55.89	52.65	6.05
4000.00	65.32	18.50	19.98
7000.00	34.84	3.18	33.42



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