CBP-A1060C+

 50Ω 1015 to 1105 MHz

The Big Deal

- Excellent Rejection
- Low passband Insertion Loss
- Miniature shielded package



CASE STYLE: MP1766

Product Overview

CBP-A1060C+ is a ceramic-coaxial-resonator based bandpass filter in a shielded package fabricated using SMT technology. This filter offers outstanding close in rejection, low insertion loss and high power handling for use in aviation, mobile radio, broadband and fixed wireless.

Key Features

Feature	Advantages
High Selectivity	The CBP-A1060C+ filter incorporates High-Q ceramic resonators that enables sharp rejection near passband.
Low Passband VSWR	This filter maintains typical VSWR over a narrow passband frequency range making this filter easier to integrate into receiver and transmitter RF chains with less concerns for in band frequency ripple.
Rugged construction	The CBP-A1060C+ has been qualified over wide range of thermal, mechanical and environmental conditions including withstanding the stress of extensive solder reflow cycles.

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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"); Puchasers 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

Bandpass Filter

 50Ω 1015 to 1105 MHz

CBP-A1060C+



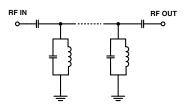
Features

- · Low Insertion loss
- High selectivity
- Miniature shielded package

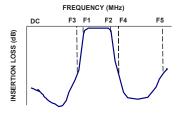
Applications

- Traffic collision avoidance system (TCAS)
- · Aeronautical radio navigation
- · Fixed satellite
- · Radio astronomy
- Radar and navigation system

Functional Schematic



Typical Frequency Response



+RoHS Compliant

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

Electrical Specifications at 25°C

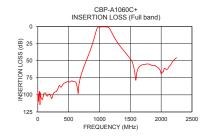
Parai	meter	F#	Frequency (MHz)	Min.	Тур.	Max.	Unit
	Center Frequency	_	_	_	1060	_	MHz
Pass Band	Insertion Loss	F1-F2	1015-1105	_	0.7	2	dB
	VSWR	F1-F2	1015-1105	_	1.3	_	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC-865	20	30	_	dB
Stop Bariu, Lower	VSWR	DC-F3	DC-865	_	20	_	:1
Stop Band, Upper	Insertion Loss	F4-F5	1350-2250	20	29	_	dB
Stop Baild, Opper	VSWR	F4-F5	1350-2250	_	20	_	:1

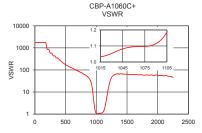
Maximum Ratings							
Operating Temperature	-40°C to 85°C						
Storage Temperature	-55°C to 100°C						
RF Power Input	5W						

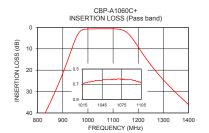
Permanent damage may occur if any of these limits are exceeded.

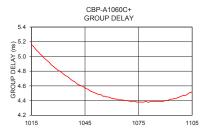
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	112.60	1737.18	1015	5.16
760	56.05	75.53	1019	5.06
865	31.24	46.96	1023	4.96
920	15.22	24.14	1028	4.85
940	8.61	11.24	1034	4.74
956	4.01	4.48	1039	4.66
967	2.05	2.43	1042	4.61
983	0.98	1.35	1047	4.55
1015	0.69	1.03	1050	4.51
1060	0.63	1.09	1055	4.46
1088	0.64	1.11	1060	4.43
1105	0.68	1.19	1065	4.41
1144	1.57	2.28	1070	4.39
1162	3.15	4.15	1075	4.38
1185	6.55	9.96	1080	4.38
1220	12.67	28.49	1085	4.39
1310	25.80	62.05	1090	4.40
1350	30.56	66.82	1095	4.43
1560	61.63	62.05	1100	4.47
2250	45.82	45.72	1105	4.52









Notes
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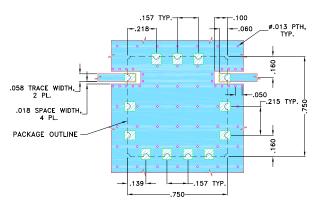
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Pad Connections

INPUT	1
OUTPUT	10
GROUND	2.3.4.5.6.7.8.9.11.12.13

Demo Board MCL P/N: TB-684+ Suggested PCB Layout (PL-373)



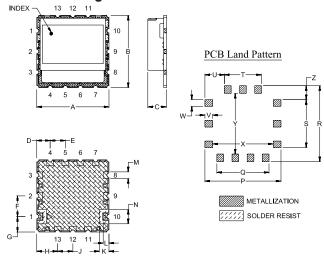
NOTES:

- TRACE WIDTH IS SHOWN FOR OAK (OAK-602) WITH DIELECTRIC THICKNESS
 .022"±.0015". COPPER: 1/2 OZ. EACH SIDE.
 FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.



DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

Outline Drawing



Outline Dimensions (inch)

A . 750 19.05	. 750 19.05	C .210 5.33	. 139 3.53	. 157 3.99	F .215 5.46	G .160 4.06	H . 218 5.54	. 157 3.99	.100 2.54	L .060 1.52	M .069 1.75	N . 149 3.78
P . 790 20.07	Q .541 13.74	R . 790 20.07	S . 499 12.67	T .384 9.75	U . 203 5.16	V .080 2.03	W .069 1.75	. 630 16.00	. 630 16.00	Z . 145 3.68		wt, grams 4.6

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