

Surface Mount Bandpass Filter

50Ω 663 to 723 MHz

Features

- Low insertion loss, 1.4dB typ.
- Flat group delay response, 1.5ns typ.
- Miniature shielded package

Applications

- IF signal processing
- Military hi-rel systems
- Harmonic rejection
- Transmitters / Receivers
- Telecommunications and Broadband wireless

Pad Connections

INPUT	1
OUTPUT	8
GROUND	2,3,4,5,6,7

Outline Dimensions (inch mm)

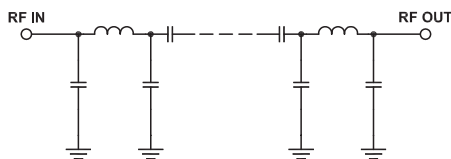
A	B	C	D	E	F	G
.44	.74	.27	.200	.07	.060	.040
11.18	18.80	6.86	5.08	1.78	1.52	1.02
H	J	K	L	M		wt
.660	.200	.470	.055	.060		grams
16.76	5.08	11.94	1.40	1.52		3.0

Note: Please refer to case style drawing for details

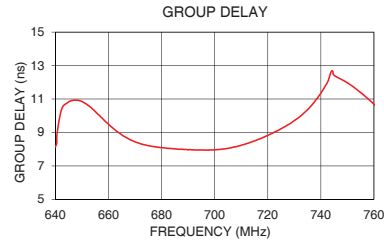
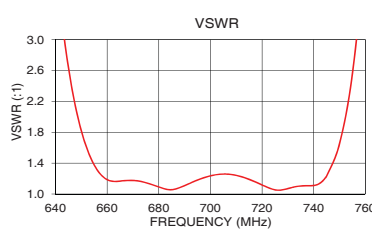
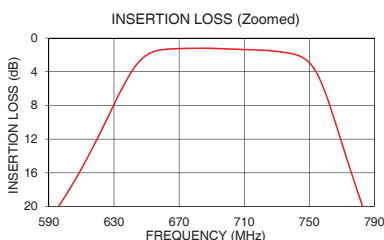
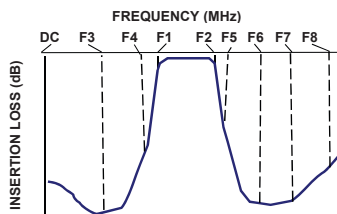
Maximum Ratings	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	6 W max.

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

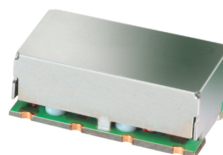
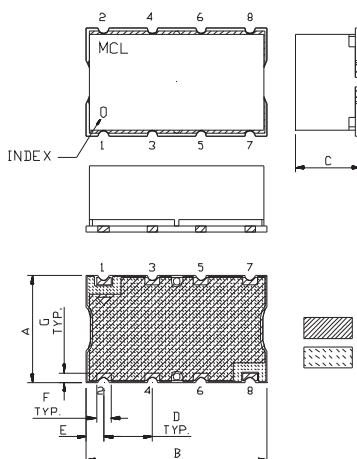
Functional Schematic



Typical Frequency Response

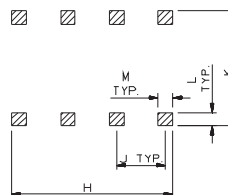


Outline Drawing



ECO SXBP-693+

PCB Land Pattern



Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center frequency	-	-	693	-	MHz
	Insertion Loss	F1-F2	-	1.4	2.2	dB
	VSWR	F1-F2	-	1.3	1.67	:1
Stop Band, Lower	Insertion Loss	DC-F3	40	46	-	dB
		F3-F4	20	27	-	dB
Stop Band, Upper	Insertion Loss	F5-F6	20	29	-	dB
		F6-F7	40	48	-	dB
		F7-F8	30	38	-	dB

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	97.88	355.91	663	9.08
50	61.65	552.19	666	8.76
100	56.72	510.48	669	8.51
420	45.63	140.66	672	8.34
565	27.65	84.10	675	8.21
595	20.28	50.09	678	8.14
644	3.12	2.87	681	8.08
663	1.31	1.16	684	8.04
680	1.21	1.09	687	8.00
693	1.24	1.15	690	7.96
710	1.36	1.24	693	7.95
723	1.46	1.07	696	7.95
750	2.91	1.65	699	7.96
785	21.24	21.99	702	7.98
800	28.78	33.34	705	8.06
850	50.16	63.33	708	8.14
800	28.78	33.34	711	8.28
1000	55.88	119.60	715	8.50
2000	49.91	1189.85	720	8.83
5000	47.57	272.03	723	9.06