

SAW Components

Data Sheet B7840

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SAW Components B7840
Low-Loss Filter 1575,42 MHz

Data Sheet

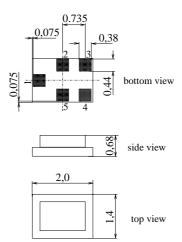
Features

- Low loss RF filter for GPS receivers
- Unbalanced to balanced operation
- Low amplitude ripple
- Impedance transformation from 50 Ω to 100 Ω
- Package for Surface Mounted Technology (SMT)

Terminals

Ni, gold-plated

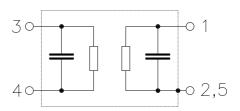
Chip Sized SAW Package



Dimensions 2,0x1,4 mm², approx. weight 0,007 g

Pin configuration

1 Input, unbalanced 3, 4 Output, balanced 2, 5 Case ground



Туре	Ordering code	Marking and Package Packing			
		according to	according to		
B7840	B39162-B7840-C710	C61157-A7-A82	F61074-V8151-Z000		

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	Τ	- 40/ + 85	°C	
Storage temperature range	$T_{\rm stg}$	- 40/ + 85	°C	
DC voltage	$V_{\rm DC}$	3	V	
Source power		10	dD.m	8241525, 17102500 MHz
source 50 Ω , load 100 Ω	P_{s}	5	dBm	elsewhere



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Characteristics

Operating temperature range: $T_{\rm A} = -30 \dots +85 \,^{\circ}{\rm C}$ Terminating source impedance: $Z_{\rm S} = 50 \,\Omega$ unbal. Terminating load impedance: $Z_{\rm L} = 100 \,\Omega$ bal.

		min.	typ.	max.	
Nominal frequency	f _N	_	1575,42	_	MHz
Maximum insertion attenuation					
1574,42MHz 1576,42MHz*)	α_{max}	_	1,2	1,6	dB
1574,42MHz 1576,42 MHz		_	1,2	1,7	dB
Amplitude ripple in passband (p-p)	Δα				
1574,42MHz 1576,42 MHz		_	0,1	0,3	dB
Output phase balance $(\phi(S_{31})-\phi(S_{21})+180^{\circ})$					
1574,42MHz 1576,42 MHz		-10	6	10	۰
Output amplitude balance ($ S_{31}/S_{21} $)					
1574,42MHz 1576,42 MHz		-1,0	0,2	1,0	dB
Return loss					
1574,421576,42 MHz		11,0	21	_	dB
VSWR 1574,421576,42 MHz		_	1,2	1,8	
Absolute attenuation	~				
100,0 MHz 960,0 MHz	α_{rel}	40	48		dB
960,0 MHz 1425,0 MHz		35	42		dB
1425,0 MHz 1475,0 MHz		30	42	_	dB
1475,0 MHz 1515,0 MHz		20	32	_	dB
1515,0 MHz 1525,0 MHz		17	27	_	dB
1625,0 MHz 1635,0 MHz		12	30	_	dB
1635,0 MHz 1675,0 MHz		20	30	_	dB
1675,0 MHz 1750,0 MHz		30	34	_	dB
1750,0 MHz 1805,0 MHz		35	44	_	dB
1805,0 MHz 1980,0 MHz		40	47	_	dB
1980,0 MHz 2400,0 MHz		35	39	_	dB
2400,0 MHz 3155,0 MHz		40	52	_	dB
3155,0 MHz 6000,0 MHz		35	44	_	dB

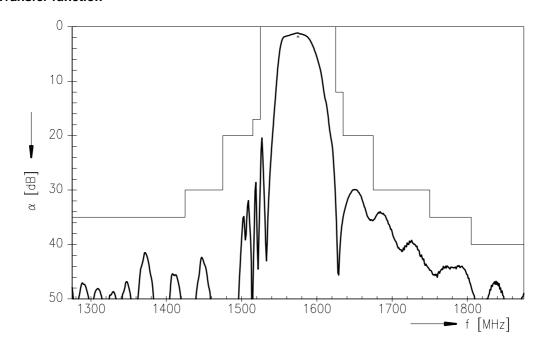
^{*)} T_A= +25 °C

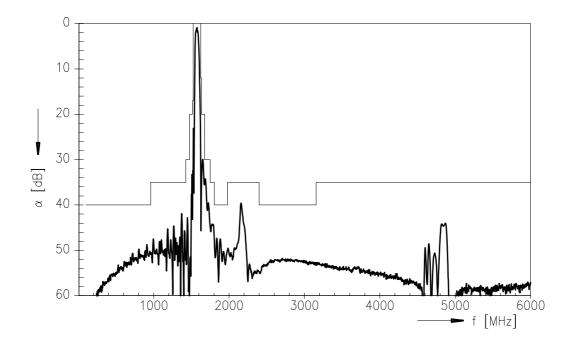


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Transfer function







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