

SAW Components

Data Sheet B5029





SAW Components B5029
Low-Loss Filter 153,6 MHz

Data Sheet

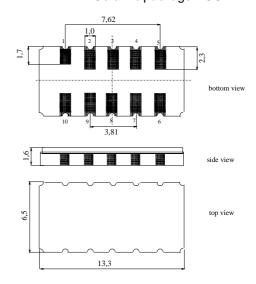
Features

- Low-loss IF filter for W-CDMA base station, transmit path
- 32 MHz usable bandwidth
- Balanced or unbalanced operation possible
- Hermetically sealed ceramic SMD package

Terminals

Gold plated

Ceramic package DCC12A



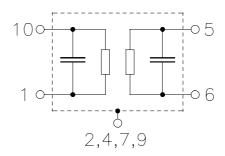
Dimensions in mm, approx. weight 0,4 g

Pin configuration

10	Input
4	Lance of the

1 Input ground5 Output

6 Output ground 2, 4, 7, 9 Case Ground 3, 8 To be grounded



Туре	Ordering code	Marking and Package	Packing		
		according to	according to		
B5029	B39151-B5029-H510	C61157-A7-A94	F61074-V8163-Z000		

Electrostatic Sensitive Device (ESD)

Maximum ratings

_			
Operable temperature range	T	-30 / +85	°C
Storage temperature range	$T_{\rm stg}$	-30 / +85	°C
DC voltage	$V_{\rm DC}$	0	V
Source power	$P_{\rm s}$	0	dBm



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Characteristics

Operating temperature range: $T = -10 ... 80 \,^{\circ}C$

Terminating source impedance: $Z_{\rm S}=50~\Omega$ unbalanced and matching network $Z_{\rm L}=50~\Omega$ unbalanced and matching network

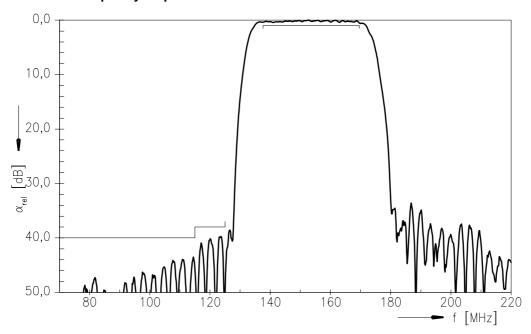
			min.	typ.	max.	
Nominal frequency		f_{N}	_	153,6	_	MHz
Minimum insertion attenuation		α_{min}	_	12,5	15,0	dB
(including matching network)						
Passband width						
$\alpha_{\text{rel}} \leq 1 \text{ dB}$		B_{1dB}	32	37	_	MHz
Amplitude ripple (p-p)		Δα				
	$f_{\rm N} \pm 16~{\rm MHz}$		_	0,6	1,0	dB
Group delay ripple (p-p)		Δτ				
	$f_{\rm N} \pm 16~{\rm MHz}$		-	25	100	ns
Absolute Group delay	$f_{\rm N} \pm 16~{ m MHz}$	τ	_	0,32	0,6	μs
Phase ripple (rms)		$\Delta\phi_{\text{rms}}$				
	$f_{\rm N} \pm 16~{\rm MHz}$		_	1,1	1,5	°
Phase ripple (p-p)		$\Delta\phi_{\text{p-p}}$				
	$f_{\rm N} \pm 16~{\rm MHz}$		_	7	10	۰
Relative attenuation (relative to α_{min})		α_{rel}				
70 MHz	115 MHz		40	42	_	dB
115 MHz	125 MHz		38	40	_	dB
275 MHz	350 MHz		35	45	_	dB
400 MHz	1000 MHz		40	47	_	dB
1000 MHz	2000 MHz		30	37	_	dB
Input and Output return loss	$f_N \pm 16 \text{ MHz}$		6	6,5	_	dB
Temperature coefficient of frequency			_	- 87	_	ppm/K



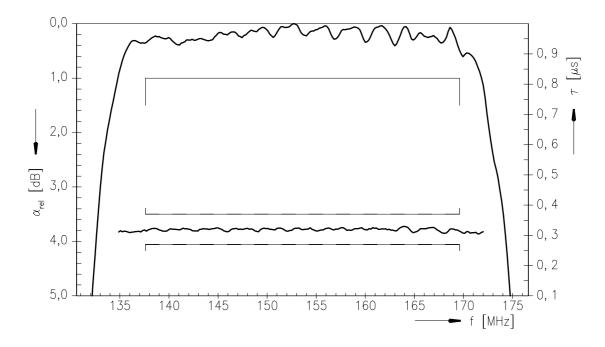
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Normalized frequency response



Normalized frequency response (pass band)



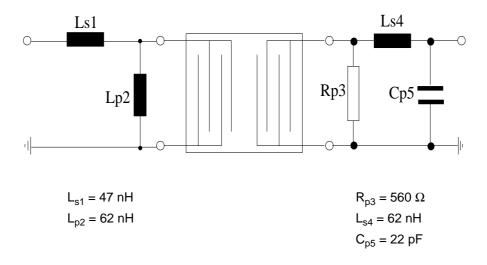


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Matching network to 50 Ω (element values depend on pcb layout)



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