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SAW filters for infrastructure systems

Series/Type: B7823

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product		Deadline Last Orders	Last Shipments
B39202B7823C710	B39202B9007E610	2010-06-25	2011-06-30	2011-09-30

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.



B7823

Low-Loss Filter for Mobile Communication

1960,0 MHz

Preliminary Data



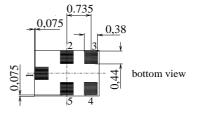
Chip sized SAW package QCS5C

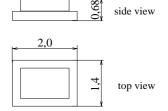
Features

- Low-loss RF filter for mobile telephone PCS systems, receive path
- Low amplitude ripple
- Usable passband 60 MHz
- Unbalanced to unbalanced operation
- Package for Surface Mount Technology (SMT)

Terminals

Ni, gold-plated

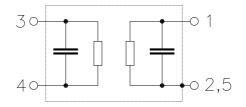




Dimensions in mm, approx. weight 0,007 g

Pin configuration

1 Input, unbalanced
4 Output, unbalanced
2,5 Case ground
3 to be grounded



Туре	Ordering code	Marking and Package according to	Packing according to
B7823	B39202-B7823-C710	C61157-A7-A111	F61074-V8151-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 30 / + 85	°C	
Storage temperature range	$T_{ m stg}$	- 40 / + 85	°C	
Input Power at	3			
GSM850, GSM900	P_{IN}	15	dBm	peak power of GSM signal,
GSM1800, GSM1900	$P_{\rm IN}$	12	dBm	duty cycle 4:8
Tx bands				



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Characteristics

 $T = +25 \pm 2 \degree C$ Operating Temperature Range: $Z_{\rm S} = 50\Omega$ (unbalanced) $Z_{\rm L} = 50\Omega$ (unbalanced) Terminating source impedance: Terminating load impedance:

			min.	typ.	max.	
Center frequency		$f_{\mathbb{C}}$	_	1960,0	_	MHz
Maximum insertion attenuation	000 1411	α_{max}		0.0	0.0	
1930,0 19	90,0 MHz		_	2,3	2,8	dB
Amplitude ripple (p-p)		$\Delta \alpha$				
1930,0 19	90,0 MHz		_	0,8	1,3	dB
I WOWD						
Input VSWR	90,0 MHz			1 7	1.0	
1930,0199	90,0 IVITZ		_	1,7	1,9	
Output VSWR						
1930,0199	90,0 MHz		_	1,8	2,0	
Attenuation		α				
0,0 15	,		35	42	_	dB
1500,0 17	-		30	38	_	dB
1700,0 18	50,0 MHz		25	30	_	dB
1850,0 18	90,0 MHz		22	25		dB
1890,0 19	10,0 MHz		13	16	_	dB
2010,0 20	70,0 MHz		13	16	_	dB
2070,0 20	90,0 MHz		20	24	_	dB
2090,0 22	00,0 MHz		25	28	_	dB
2200,0 24	00,0 MHz		25	32	_	dB
2400,0 25	00,0 MHz		30	35	_	dB
2500,0 36	-		30	35	_	dB
3600,0 40	•		30	38	_	dB
4000,0 60	-		25	35	_	dB



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Preliminary Data



Characteristics

Operating Temperature Range: $T = -10 \text{ to } +80^{\circ}\text{C}$ Terminating source impedance: $Z_{\text{S}} = 50\Omega$ (unbalanced) Terminating load impedance: $Z_{\text{L}} = 50\Omega$ (unbalanced)

				min.	typ.	max.	
Center frequency			$f_{\mathbb{C}}$	_	1960,0	_	MHz
Maximum insertion attenuation		α_{max}					
	1990,0	MHz	max	_	2,3	3,0	dB
Amplitude ripple (p-p)			$\Delta \alpha$				
1930,0	1990,0	MHz		_	0,8	1,5	dB
Input VSWR							
-	1990,0	MHz		_	1,7	1,9	
Output VSWR							
-	1990,0	MHz		_	1,8	2,0	
Attenuation			α				
0,0	1500,0	MHz		35	42	_	dB
1500,0	1700,0	MHz		30	38	_	dB
1700,0	1850,0	MHz		25	30	_	dB
1850,0	1890,0	MHz		20	24	_	dB
1890,0	1910,0	MHz		9	13	_	dB
2010,0	2070,0	MHz		9	13	_	dB
2070,0	2090,0	MHz		18	23	_	dB
2090,0	2200,0	MHz		25	28	_	dB
2200,0	2400,0	MHz		25	32	_	dB
2400,0	2500,0	MHz		30	35	_	dB
2500,0	3600,0	MHz		30	35	_	dB
3600,0	4000,0	MHz		30	38	_	dB
4000,0	6000,0	MHz		25	35	_	dB



B7823

Low-Loss Filter for Mobile Communication

1960,0 MHz

Preliminary Data

Characteristics

Operating Temperature Range: $T = -30 \text{ to } +85^{\circ}\text{C}$ Terminating source impedance: $Z_{\text{S}} = 50\Omega$ (unbalanced) Terminating load impedance: $Z_{\text{L}} = 50\Omega$ (unbalanced)

		min.	typ.	max.	
Center frequency	$f_{\mathbb{C}}$	_	1960,0	_	MHz
Maximum insertion attenuation	α_{max}		0.0	0.0	ID.
1930,0 1990,0 MH	∃Z	_	2,6	3,3	dB
Amplitude ripple (p-p)	Δα				
1930,0 1990,0 M	Ηz	_	1,1	1,8	dB
Input VSWR			4.0		
1930,01990,0 MH	∃Z	_	1,9	2,1	
Output VSWR					
1930,01990,0 Mi	Нz	_	2,0	2,2	
Attenuation	α				
,	Hz	35	42	_	dB
·	Hz	30	38	_	dB
·	Hz	25	30	_	dB
1850,0 1890,0 MH	Ηz	20	24	_	dB
1890,0 1910,0 MF	Ηz	8	12	_	dB
2010,0 2070,0 MF	Ηz	6*	10*	_	dB
2070,0 2090,0 MF	Ηz	18	23	_	dB
2090,0 2200,0 MF	Ηz	25	28	_	dB
2200,0 2400,0 MH	Ηz	25	32	_	dB
2400,0 2500,0 MH	Ηz	30	35	_	dB
2500,0 3600,0 MH	Ηz	30	35	_	dB
3600,0 4000,0 MF	Ηz	30	38	_	dB
4000,0 6000,0 MH	Ηz	25	35	_	dB

^{* 7}dB (min.) (11dB typ.) for T= -20 to +85°C



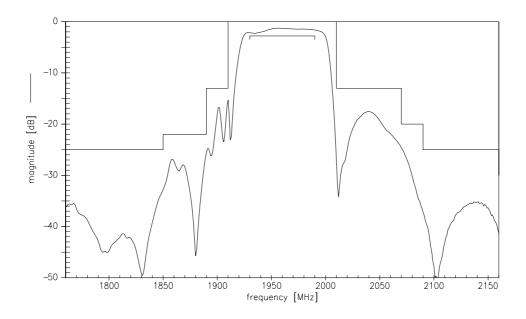
Low-Loss Filter for Mobile Communication

1960,0 MHz

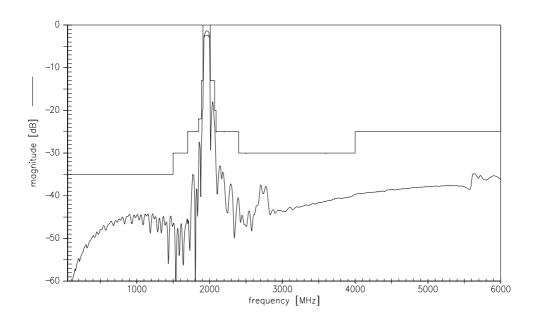
Preliminary Data



Transfer function (spec for 25°C)



Transfer function (wideband)





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Preliminary Data



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This brochure replaces the previous edition.

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Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.