SAW filters for infrastructure systems

Series/Type: B7823

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	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.

⨁TDK

SAW Components	**B7823**

| **Low-Loss Filter for Mobile Communication**	**1960,0 MHz**

Preliminary Data   ᔕ�gol᧗ᑐ

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
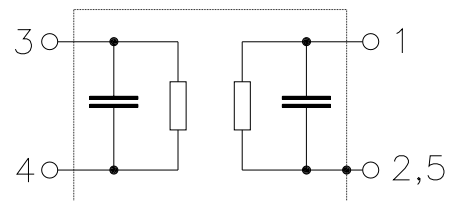- Package for **S**urface **M**ount **T**echnology (**SMT**)

Terminals

- Ni, gold-plated

0.735
0.075
0.38
0.075
0.44
bottom view

0.68 side view

2,0
1,4
top view
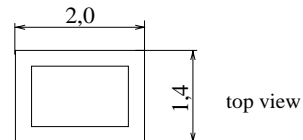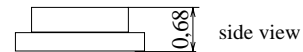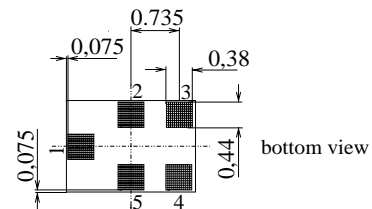
Dimensions in mm, approx. weight 0,007 g

Pin configuration

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

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

Electrostatic **S**ensitive **D**evice (**ESD**)

Maximum ratings

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

Characteristics

Operating Temperature Range:	T	=	$+25 \pm 2\ ^{\circ}C$
Terminating source impedance:	Z_S	=	50Ω (unbalanced)
Terminating load impedance:	Z_L	=	50Ω (unbalanced)

		min.	typ.	max.	
Center frequency	f_C	—	1960,0	—	MHz
Maximum insertion attenuation	α_{max}				
1930,0 ... 1990,0 MHz		—	2,3	2,8	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1930,0 ... 1990,0 MHz		—	0,8	1,3	dB
Input VSWR					
1930,0 ...1990,0 MHz		—	1,7	1,9	
Output VSWR					
1930,0 ...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		22	25	—	dB
1890,0 ... 1910,0 MHz		13	16	—	dB
2010,0 ... 2070,0 MHz		13	16	—	dB
2070,0 ... 2090,0 MHz		20	24	—	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

Characteristics

Operating Temperature Range: T = -10 to +80˚C
Terminating source impedance: Z_S = 50Ω (unbalanced)
Terminating load impedance: Z_L = 50Ω (unbalanced)

			min.	typ.	max.	
Center frequency		f_C	—	1960,0	—	MHz
Maximum insertion attenuation		α_{max}				
1930,0 ... 1990,0	MHz		—	2,3	3,0	dB
Amplitude ripple (p-p)		$\Delta\alpha$				
1930,0 ... 1990,0	MHz		—	0,8	1,5	dB
Input VSWR						
1930,0 ...1990,0	MHz		—	1,7	1,9	
Output VSWR						
1930,0 ...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

SAW Components	**B7823**
Low-Loss Filter for Mobile Communication	**1960,0 MHz**

Preliminary Data   SMD

Characteristics

Operating Temperature Range:	T	= -30 to +85°C
Terminating source impedance:	Z_S	= 50Ω (unbalanced)
Terminating load impedance:	Z_L	= 50Ω (unbalanced)

		min.	**typ.**	**max.**	
Center frequency	f_C	—	1960,0	—	MHz
Maximum insertion attenuation	α_{max}				
1930,0 ... 1990,0 MHz		—	2,6	3,3	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1930,0 ... 1990,0 MHz		—	1,1	1,8	dB
Input VSWR					
1930,0 ...1990,0 MHz		—	1,9	2,1	
Output VSWR					
1930,0 ...1990,0 MHz		—	2,0	2,2	
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		8	12	—	dB
2010,0 ... 2070,0 MHz		6*	10*	—	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

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

Preliminary Data

SMD

Transfer function (spec for 25°C)
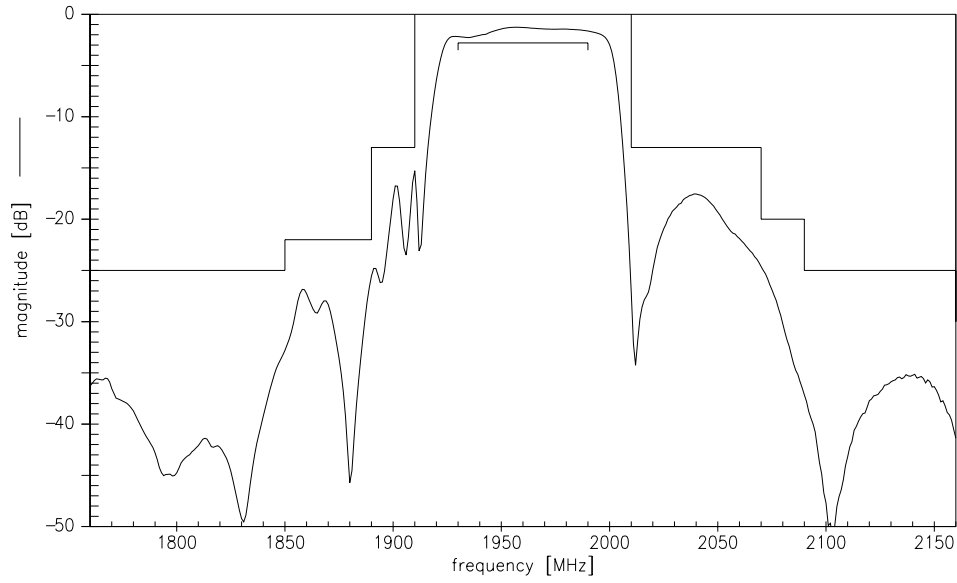
Transfer function (wideband)
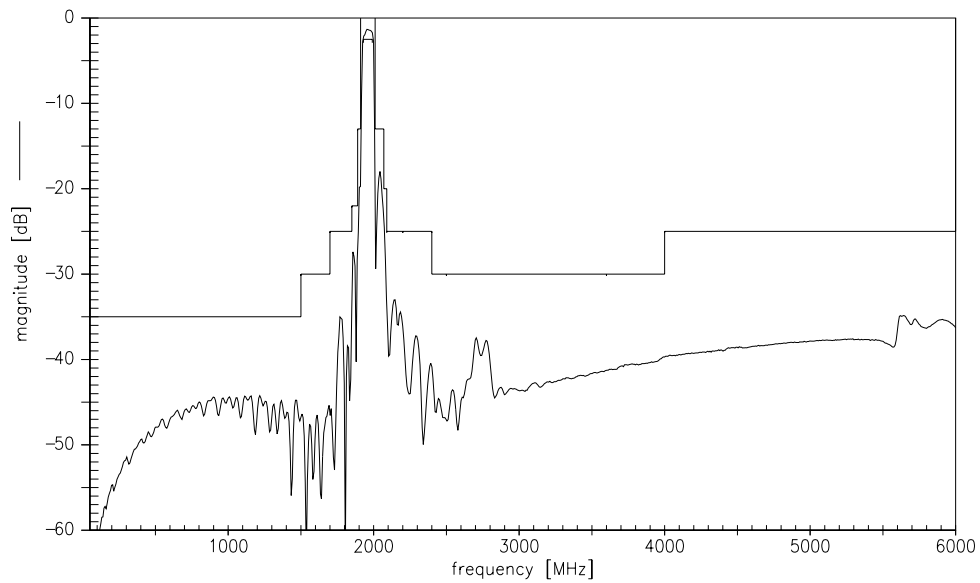
The information contained in this brochure describes the type of component and shall not be considered as guaranteed characteristics. Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

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