

Data Sheet B7824





B7824

Low-Loss Filter for Mobile Communication

1960,00 MHz

Data Sheet



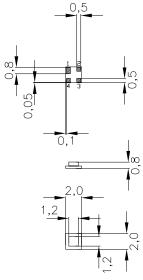
Chip Sized SAW Package DCS4A

Features

- Low-loss RF filter for mobile telephone PCS systems, receive path
- Usable passband 60 MHz
- \blacksquare No matching network required for operation at 50 Ω
- Suitable for GPRS class 1 to 12
- Package for Surface Mounted Technology (SMT)

Terminals

■ Ni, gold-plated



Dimensions in mm, approx. weight 0,01 g

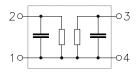
Pin configuration

0	
2	Input

1 Input - ground

3 Output

4 Output - ground



Туре	Ordering code	Marking and Package	Packing
		according to	according to
B7824	B39202-B7824-A510	C61157-A7-A63	F61074-V8154-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operating temperature range	T	- 40/+ 85	°C	
Storage temperature range	$T_{ m stg}$	- 40/+ 85	°C	
DC voltage	$V_{\rm DC}$	5	V	
ESD voltage	V_{ESD}	50	V	
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				



B7824

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Data Sheet

Characteristics

Operating temperature range: $T = +25 + 2^{\circ} \text{C}$ Terminating source impedance: $Z_{\text{S}} = 50 \ \Omega$ Terminating load impedance: $Z_{\text{L}} = 50 \ \Omega$

				min.	typ.	max.	
Center frequency			f _C	_	1960,0	_	MHz
Maximum insertion attenuation	on		α_{max}				
1930,0	1990,0	MHz		_	2,7	3,3	dB
Amplitude ripple (p-p)			Δα				
1930,0	1990,0	MHz			1,3	1,9	dB
Input VSWR							
1930,0	1990,0	MHz			1,85	2,0	
Output VSWR							
1930,0	1990,0	MHz			1,85	2,0	
Attenuation			α				
10,0	1500,0	MHz		19,0	21,0	_	dB
1500,0	1800,0	MHz		23,0	27,0	_	dB
1800,0	1910,0	MHz		13,0	22,0	_	dB
2010,0	2070,0	MHz		11,0	18,0	_	dB
2070,0	2800,0	MHz		21,0	23,0	_	dB
2800,0	6000,0	MHz		16,0	18,0	_	dB



B7824

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Data Sheet

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Characteristics

Operating temperature range: $T = -10 \text{ to } +80^{\circ}\text{C}$

Terminating source impedance: $Z_{\rm S} = 50~\Omega$ Terminating load impedance: $Z_{\rm L} = 50~\Omega$

				min.	typ.	max.	
Center frequency			f _C	_	1960,0	_	MHz
Maximum insertion attenuati	on		α_{max}				
1930,0	1990,0	MHz		_	3,2	4,0	dB
Amplitude ripple (p-p)			Δα				
1930,0	1990,0	MHz			1,7	2,5	dB
Input VSWR							
1930,0	1990,0	MHz			1,85	2,0	
Output VSWR							
1930,0	1990,0	MHz			1,85	2,0	
Attenuation			α				
10,0	1500,0	MHz		19,0	21,0	_	dB
1500,0	1800,0	MHz		23,0	27,0	_	dB
1800,0	1910,0	MHz		8,0	15,0	_	dB
2010,0	2070,0	MHz		8,0	14,0	_	dB
2070,0	2800,0	MHz		21,0	23,0	_	dB
2800,0	6000,0	MHz		16,0	18,0	_	dB



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Characteristics

Operating temperature range: $T = -30 \text{ to } +85^{\circ}\text{C}$

Terminating source impedance: $Z_{\rm S} = 50~\Omega$ Terminating load impedance: $Z_{\rm L} = 50~\Omega$

				min.	typ.	max.	
Center frequency			f _C	_	1960,0	_	MHz
Maximum insertion attenuation	on		α_{max}				
1930,0	1990,0	MHz			3,3	4,3	dB
Amplitude ripple (p-p)			Δα				
1930,0	1990,0	MHz			1,7	2,7	dB
Input VSWR							
1930,0	1990,0	MHz			1,85	2,0	
Output VSWR							
1930,0	1990,0	MHz			1,85	2,0	
Attenuation			α				
10,0	1500,0	MHz		19,0	21,0	<u> </u>	dB
1500,0	1800,0	MHz		23,0	27,0	<u> </u>	dB
1800,0	1910,0	MHz		7,5	14,0	_	dB
2010,0	2070,0	MHz		7,0	12,0	_	dB
2070,0	2800,0	MHz		21,0	23,0	_	dB
2800,0	6000,0	MHz		16,0	18,0	<u> </u>	dB

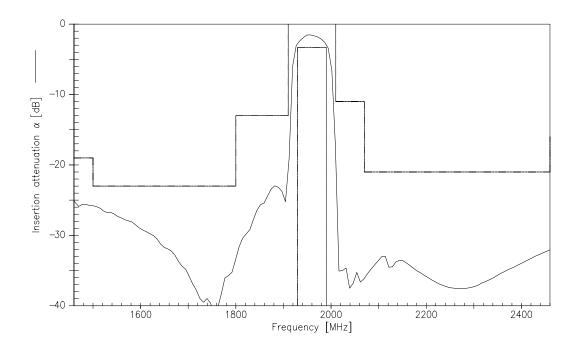


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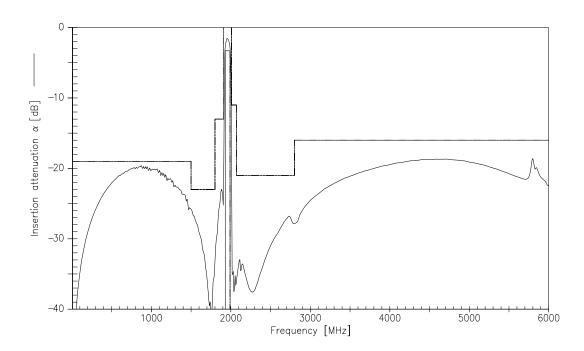
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Transfer Function(25°C spec)



Transfer function (wideband)





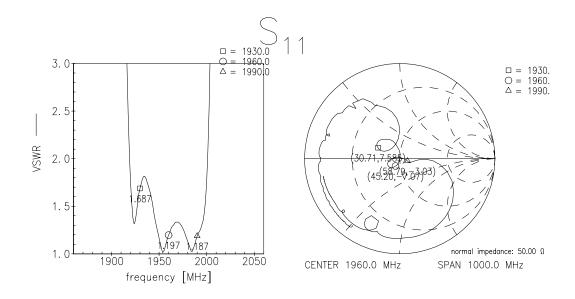
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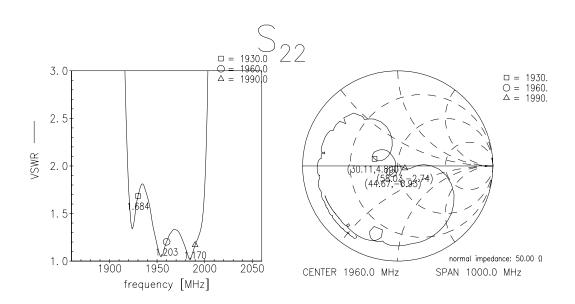
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Reflection functions







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