

SAW Components

Data Sheet B7812





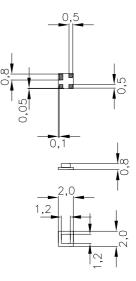
SAW Components	B7812	
Low-Loss Filter for Mo	1747,50 MHz	
Data Sheet	SMD	

Features

- Low-loss RF filter for mobile telephone PCN systems, transmit path
- High selectivity
- Usable passband 75 MHz
- No matching network required for operation at 50 Ω
- Ceramic package for Surface Mounted Technology (SMT)

Terminals

• Ni, gold-plated

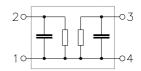


Chip sized SAW package

Dimensions in mm, approx. weight 0,01 g

Pin configuration

2	Input
1	Input - ground
3	Output
4	Output - ground



Туре	Ordering code	Marking and Package	Packing
		according to	according to
B7812	B39172-B7812-A510	C61157-A7-A63	F61074-V8099-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	Т	- 20/+ 80	°C	
Storage temperature range	T _{stg}	- 40/+ 85	°C	
DC voltage	V _{DC}	0	V	
Input power max.				source and load impedance 50 Ω
1710 1785 MHz	$P_{\rm IN}$	5	dBm	peak power of GSM signal,
				duty cycle 2 : 8
elsewhere		0	dBm	continuous wave

2



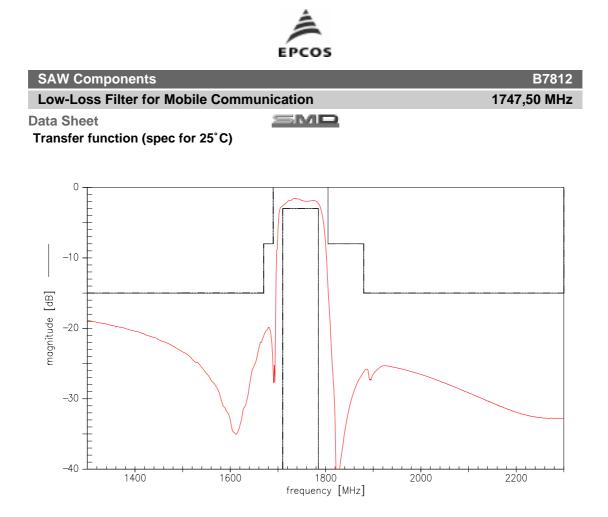
SAW Components					B7812		
Low-Loss Filter for Mobile Communication						1747,50 MHz	
Data Sheet	SM						
Characteristics							
Operating temperature range:	т	= 25 +-	າິດ				
Terminating source impedance:		$= 50 \Omega$					
Terminating load impedance:		= 50 Ω					
		1		. 4 1.000		1	
			min.	typ.	max.		
Center frequency		f _c	—	1747,5		MHz	
Maximum insertion attenuation		~					
1710,01785,0	MHz	α_{max}		2,6	3,0	dB	
1710,01705,0				2,0	5,0	UD	
Amplitude ripple (p-p)		Δα					
1710,0 1785,0	MHz		_	1,2	1,6	dB	
Input VSWR							
1710,01785,0	MHz		—	2,0	2,2		
Output VSWR	N 41 1-			2.0	0.0		
1710,01785,0	MHz		_	2,0	2,2		
Attenuation		α					
10,0 1670,0	MHz		15,0	17,0		dB	
1670,01690,0	MHz		8,0	17,0	—	dB	
1805,01880,0	MHz		8,0	12,0	—	dB	
1880,03500,0	MHz		15,0	15,0	—	dB	
3500,05200,0	MHz		12,0	14,0	—	dB	



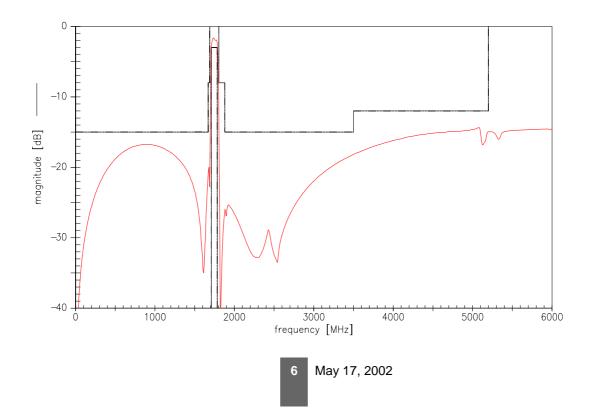
SAW Components					37812
Low-Loss Filter for Mobile Communication) MHz
Data Sheet	SME	2			
Characteristics					
Operating temperature range: Terminating source impedance: Terminating load impedance:	T =- Z _S =5 Z _L =5				
		min.	typ.	max.	
Center frequency	f _c	—	1747,5	—	MHz
Maximum insertion attenuation 1710,01785,0	α _r MHz	nax	3,0	3,5	dB
Amplitude ripple (p-p) 1710,01785,0	Δo MHz	x	1,6	2,1	dB
Input VSWR 1710,01785,0	MHz	_	2,2	2,4	
Output VSWR 1710,01785,0	MHz	-	2,2	2,4	
Attenuation 10,0 1670,0 1670,0 1690,0 1805,0 1880,0 1880,0 3500,0 3500,0 5200,0	α MHz MHz MHz MHz MHz	15,0 6,0 6,0 15,0 12,0	17,0 15,0 10,0 15,0 14,0	 	dB dB dB dB dB



SAW Components					8	37812
Low-Loss Filter for Mobile Communication					1747,50) MHz
Data Sheet	SM					
Characteristics						
Operating temperature range:			o +70°C			
Terminating source impedance: Terminating load impedance:		= 50 Ω = 50 Ω				
reminating load impedance.	<u>~</u> [- 50 32				
			min.	typ.	max.	
Center frequency		f _c	—	1747,5	—	MHz
Maximum insertion attenuation		α_{max}				
1710,01785,0	MHz		—	3,0	3,5	dB
Amplitude ripple (p-p)		Δα				
1710,01785,0	MHz	200	_	1,6	2,1	dB
				,	,	
Input VSWR						
1710,01785,0	MHz		—	2,2	2,4	
Output VSWR 1710,01785,0	MHz			2,2	2,4	
1710,01703,0			_	2,2	2,4	
Attenuation		α				
10,01670,0	MHz		15,0	17,0	—	dB
1670,01690,0	MHz		6,0	15,0	—	dB
1805,01880,0	MHz		6,0	10,0	—	dB
1880,03500,0	MHz		15,0	15,0		dB
3500,05200,0	MHz		12,0	14,0	—	dB



Transfer function (wideband)





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Published by EPCOS AG Surface Acoustic Wave Components Division, SAW MC WT P.O. Box 80 17 09, D-81617 München

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