



SAW Components

Data Sheet B7824

Data Sheet

An abstract, grayscale graphic featuring a large, stylized, and slightly blurred "EPCOS" logo. The logo is set against a background of curved, overlapping bands and a faint world map, creating a sense of global connectivity and technological advancement.



SAW Components

B7824

Low-Loss Filter for Mobile Communication

1960,00 MHz

Data Sheet



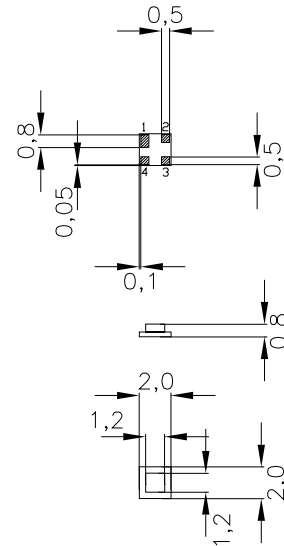
Chip Sized SAW Package DCS4A

Features

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

Terminals

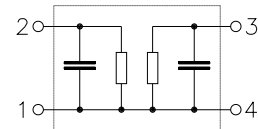
- Ni, gold-plated



Dimensions in mm, approx. weight 0,01 g

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing 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	peak power of GSM signal, duty cycle 4:8
Storage temperature range	T_{stg}	- 40/+ 85	°C	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}	50	V	
Input power at				
GSM850, GSM900	P_{IN}	15	dBm	
GSM1800, GSM1900	P_{IN}	12	dBm	
Tx bands				



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Characteristics

Operating temperature range: $T = +25 \pm 2^\circ \text{C}$

Terminating source impedance: $Z_S = 50 \Omega$

Terminating load impedance: $Z_L = 50 \Omega$

			min.	typ.	max.	
Center frequency	f_c		—	1960,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$					
	1930,0 ... 1990,0	MHz	—	2,7	3,3	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	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



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Characteristics

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

Terminating source impedance: $Z_S = 50\ \Omega$

Terminating load impedance: $Z_L = 50\ \Omega$

			min.	typ.	max.	
Center frequency	f_c		—	1960,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$					
	1930,0 ... 1990,0	MHz	—	3,2	4,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	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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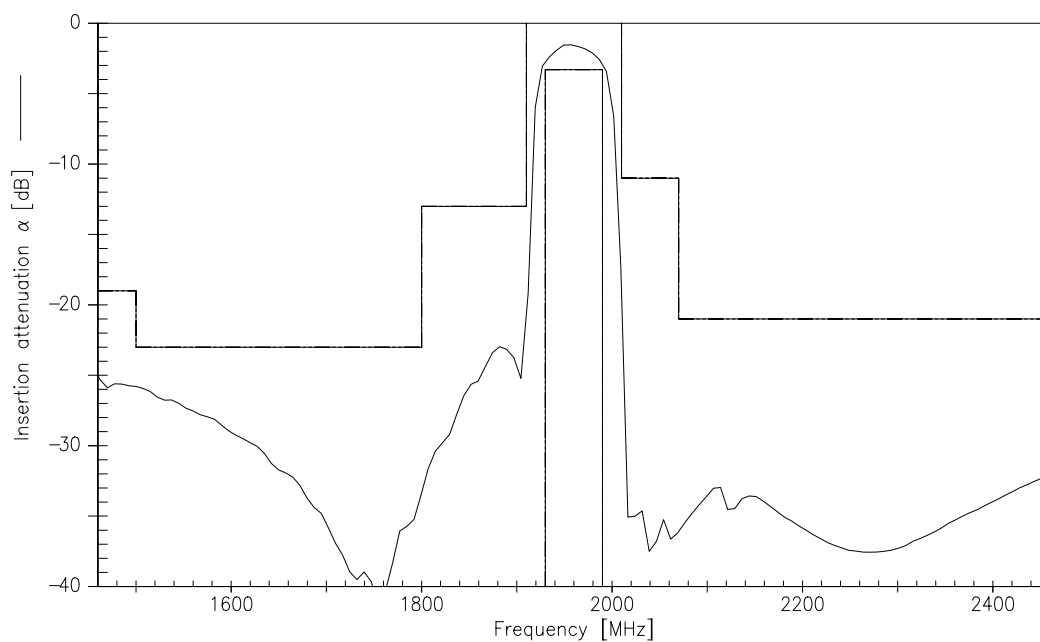


Characteristics

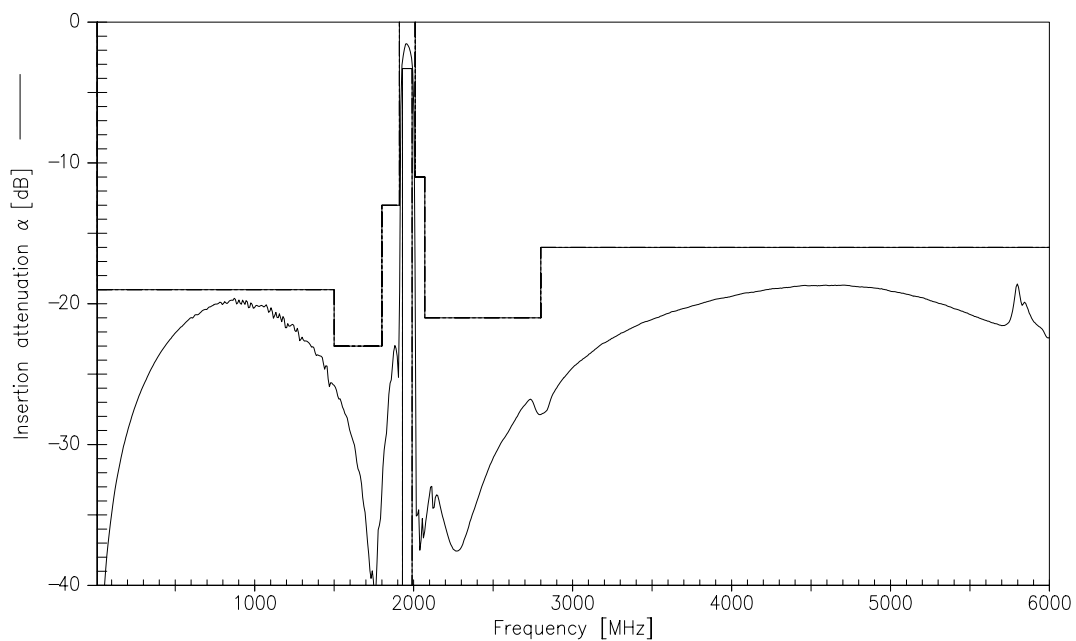
Operating temperature range: $T = -30$ to $+85^{\circ}\text{C}$
Terminating source impedance: $Z_S = 50\ \Omega$
Terminating load impedance: $Z_L = 50\ \Omega$

			min.	typ.	max.	
Center frequency	f_c		—	1960,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$					
	1930,0 ...1990,0	MHz	—	3,3	4,3	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	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	—	dB
	1500,0 ...1800,0	MHz	23,0	27,0	—	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	—	dB

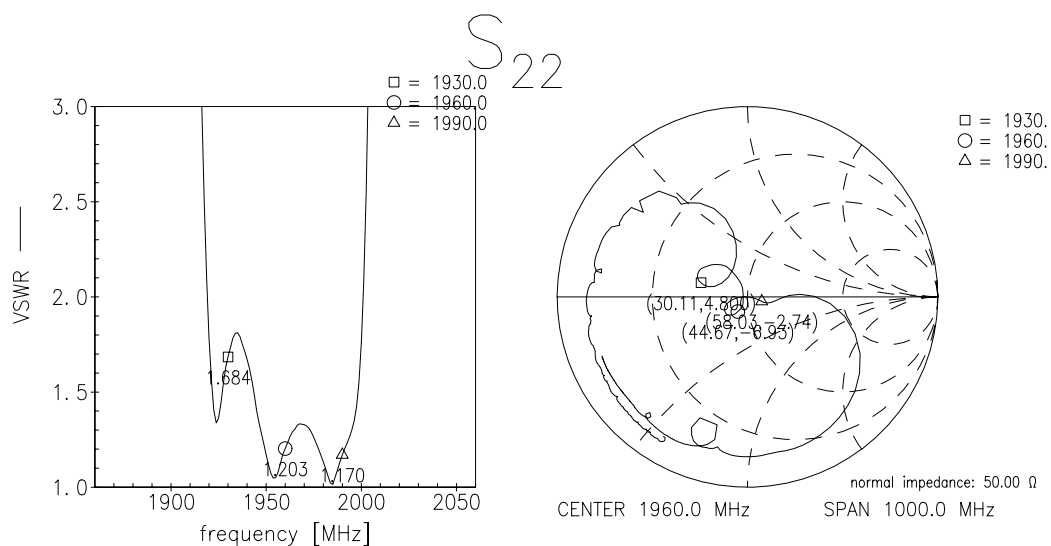
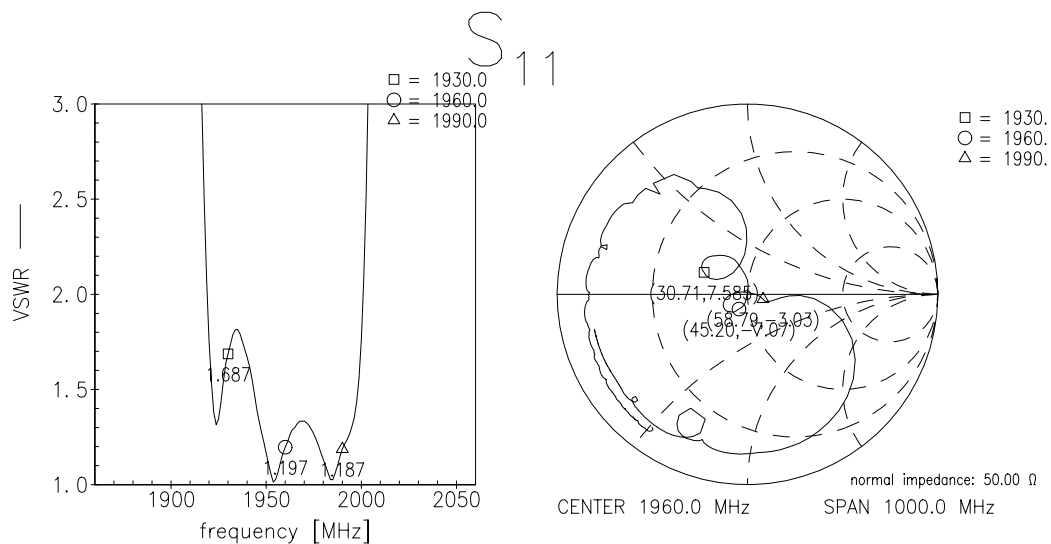
Transfer Function(25° C spec)



Transfer function (wideband)



Reflection functions





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