



SAW Components

Data Sheet B4147





SAW Components

B4147

Low-Loss Filter for Mobile Communication

836,50 MHz

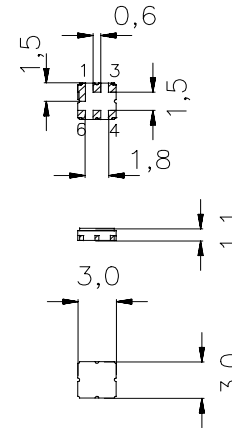
Data Sheet



Ceramic package **DCC6C**

Features

- Low-loss RF filter for mobile telephone AMPS systems, transmit path
- Usable passband 25 MHz
- No matching network required for operation at 50 Ω
- Package for **Surface Mounted Technology (SMT)**



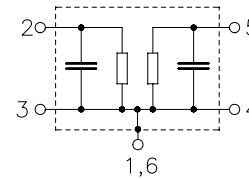
Terminals

- Ni, gold-plated

Dimensions in mm, approx. weight 0,037g

Pin configuration

- 2 Input
- 5 Output
- 1, 3, 4, 6 Ground, to be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B4147	B39841-B4147-U410	C61157-A7-A67	F61074-V8088-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 30 / + 85	°C	CDMA signal
Storage temperature range	T_{stg}	- 40 / + 85	°C	
DC voltage	V_{DC}	5	V	
Input power max.	P_{IN}	16	dBm	



SAW Components

B4147

Low-Loss Filter for Mobile Communication

836,50 MHz

Data Sheet



Characteristics

Operating temperature range: $T = +25^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

			min.	typ.	max.	
Center frequency	f_c		—	836,5	—	MHz
Maximum insertion attenuation	α_{\max}					
		824,0 ... 849,0 MHz	—	2,7	3,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
		824,0 ... 849,0 MHz	—	1,7	2,0	dB
VSWR						
		824,0 ... 849,0 MHz	—	1,78	1,92	
Attenuation	α					
		0,0 ... 779,0 MHz	31,0	34,0	—	dB
		779,0 ... 805,0 MHz	25,0	31,0	—	dB
		869,0 ... 894,0 MHz	40,0	44,0	—	dB
		894,0 ... 979,0 MHz	36,0	40,0	—	dB
		979,0 ... 1030,0 MHz	38,0	40,0	—	dB
		1030,0 ... 1300,0 MHz	36,0	39,0	—	dB
		1300,0 ... 1580,0 MHz	28,0	32,0	—	dB
		1580,0 ... 1698,0 MHz	24,0	30,0	—	dB
		1698,0 ... 2547,0 MHz	14,0	22,0	—	dB
Rx band suppression	α					
		869,0 ... 894,0 MHz	40,0	44,0	—	dB



SAW Components

B4147

Low-Loss Filter for Mobile Communication

836,50 MHz

Data Sheet



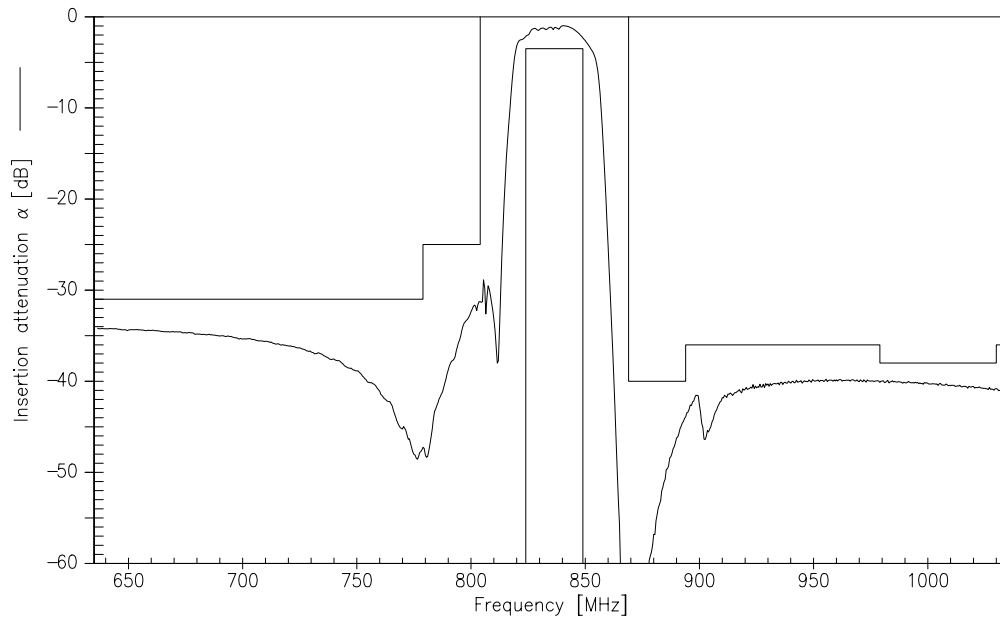
Characteristics

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

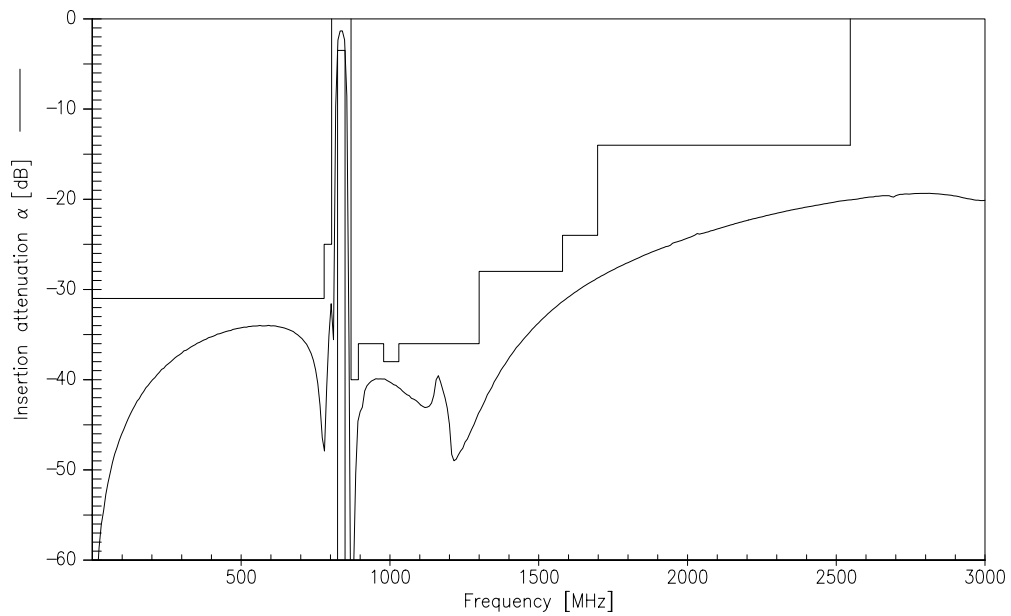
			min.	typ.	max.	
Center frequency	f_c		—	836,5	—	MHz
Maximum insertion attenuation	α_{\max}	824,0 ... 849,0 MHz	—	3,0	3,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$	824,0 ... 849,0 MHz	—	2,0	2,5	dB
VSWR		824,0 ... 849,0 MHz	—	1,78	1,92	
Attenuation	α	0,0 ... 779,0 MHz	31,0	34,0	—	dB
		779,0 ... 805,0 MHz	25,0	31,0	—	dB
		869,0 ... 894,0 MHz	40,0	43,0	—	dB
		894,0 ... 979,0 MHz	36,0	40,0	—	dB
		979,0 ... 1030,0 MHz	38,0	40,0	—	dB
		1030,0 ... 1300,0 MHz	36,0	39,0	—	dB
		1300,0 ... 1580,0 MHz	28,0	32,0	—	dB
		1580,0 ... 1698,0 MHz	24,0	30,0	—	dB
		1698,0 ... 2547,0 MHz	14,0	22,0	—	dB
Rx band suppression	α	869,0 ... 894,0 MHz	40,0	43,0	—	dB



Transfer function (narrowband measurement)

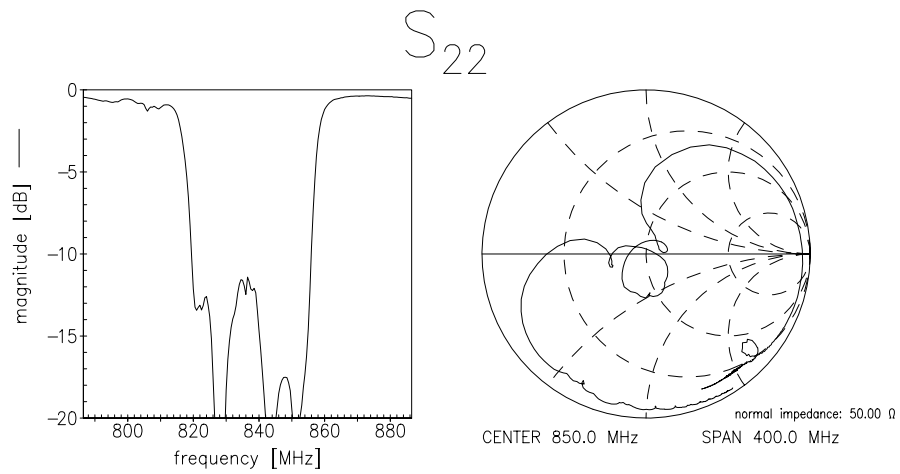
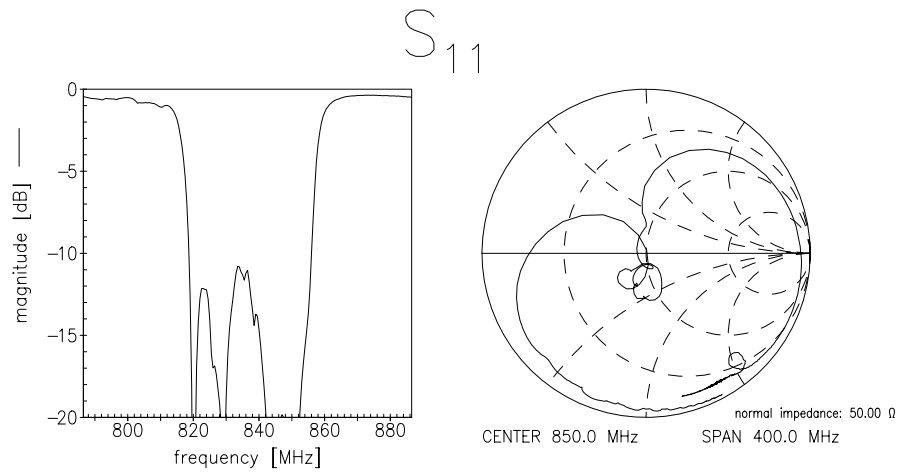


Transfer function (wideband measurement)





Reflection functions (measurement)





SAW Components

B4147

Low-Loss Filter for Mobile Communication

836,50 MHz

Data Sheet



Published by EPCOS AG

Surface Acoustic Wave Components Division, SAW MC WT

P.O. Box 80 17 09, D-81617 München

© EPCOS AG 2000. All Rights Reserved. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

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.