EPCOS

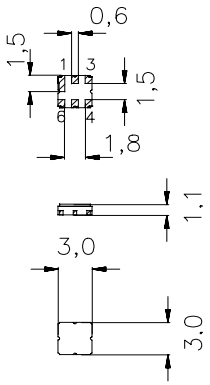
SAW Components

Data Sheet B4147

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 **S**urface **M**ounted **T**echnology **(SMT)**



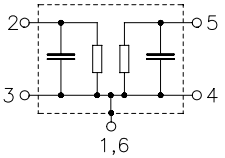
Terminals

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

Maximum ratings

Operable temperature range	T	– 30 / + 85	˚C	
Storage temperature range	T_{stg}	– 40 / + 85	˚C	
DC voltage	V_{DC}	0	V	
Source power	P_s	11	dBm	source impedance 50 Ω continous wave

Characteristics

Operating temperature range: T = +25˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

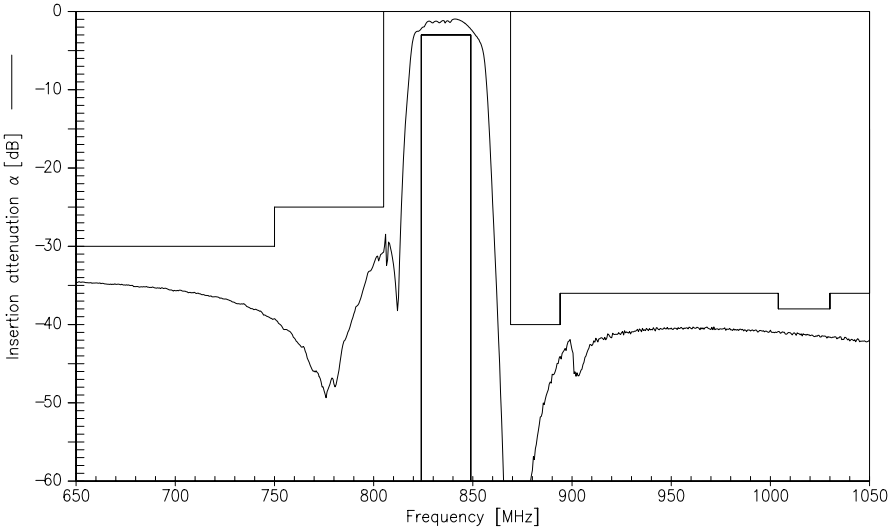
		min.	typ.	max.	
Center frequency	f_c	—	836,5	—	MHz
Maximum insertion attenuation	α_{max}				
824,0 ... 849,0 MHz		—	2,7	3,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
824,0 ... 849,0 MHz		—	1,7	2,0	dB
VSWR					
824,0 ... 849,0 MHz		—	1,78	1,92	
Attenuation	α				
0,0 ... 750,0 MHz		30,0	34,0	—	dB
750,0 ... 805,0 MHz		25,0	31,0	—	dB
869,0 ... 894,0 MHz		40,0	44,0	—	dB
894,0 ...1004,0 MHz		36,0	40,0	—	dB
1004,0 ...1030,0 MHz		38,0	40,0	—	dB
1030,0 ...1209,0 MHz		36,0	39,0	—	dB
1209,0 ...1700,0 MHz		20,0	30,0	—	dB
1700,0 ...2200,0 MHz		15,0	22,0	—	dB

Characteristics

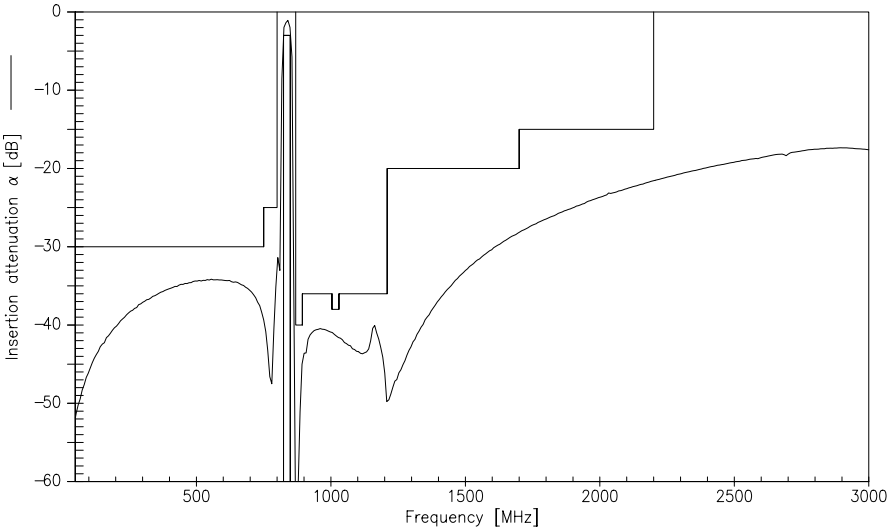
Operating temperature range: T = -30 to +85°C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		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 ... 750,0 MHz		30,0	34,0	—	dB
750,0 ... 805,0 MHz		25,0	31,0	—	dB
869,0 ... 894,0 MHz		40,0	43,0	—	dB
894,0 ...1004,0 MHz		36,0	40,0	—	dB
1004,0 ...1030,0 MHz		38,0	40,0	—	dB
1030,0 ...1209,0 MHz		36,0	39,0	—	dB
1209,0 ...1700,0 MHz		20,0	30,0	—	dB
1700,0 ...2200,0 MHz		15,0	22,0	—	dB

Transfer function

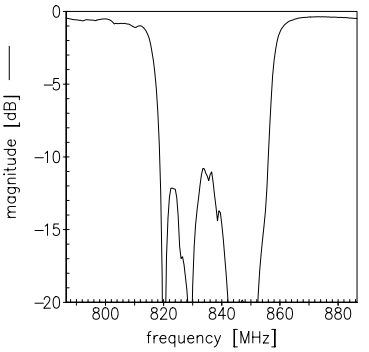


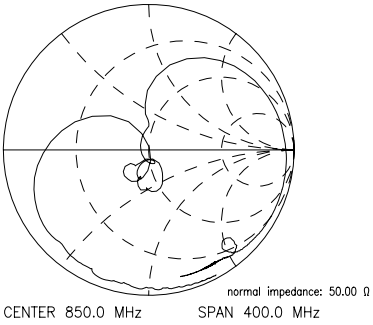
Transfer function (wideband)



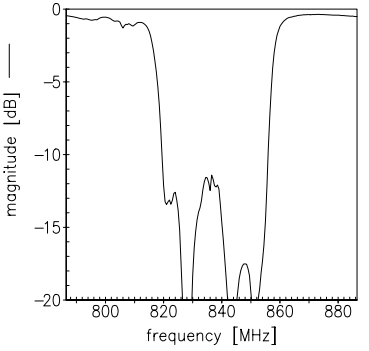
Reflection functions

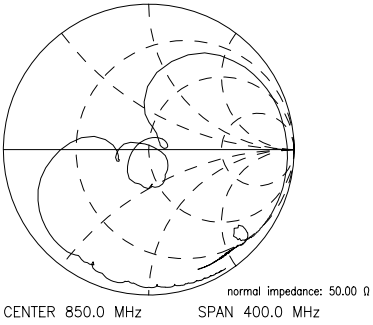
S_{11}





S_{22}





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