EPCOS

SAW Components

Data Sheet B3655

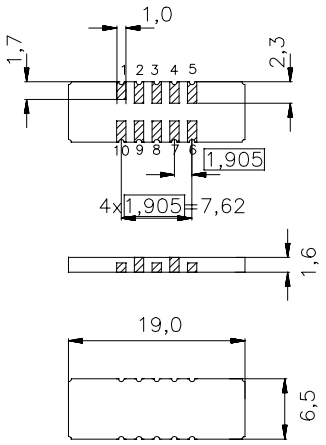
Ceramic package **DCC18**

Features

- Low-loss IF filter for DCS base station
- Rx path
- Temperature stable
- Unbalanced or balanced operation
- Ceramic SMD package

Terminals

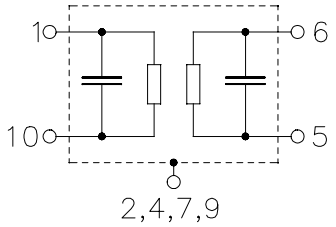
- Gold plated



Dim. in mm, aprox. weight 0,7 g

Pin configuration

1	Input
6	Output
10	Input ground
5	Output ground
3, 8	Ground
2, 4, 7, 9	Case – ground



Type	Ordering code	Marking and Package according to	Packing according to
B3655	B39241-B3655-U210	C61157-A7-A54	F61074-V8069-Z000

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

Maximum ratings

Operable temperature range	T	– 25/+ 75	˚C	
Storage temperature range	T_{stg}	– 40/+ 85	˚C	
DC voltage	V_{DC}	0	V	
Source power	P_s	10	dBm	

Data Sheet

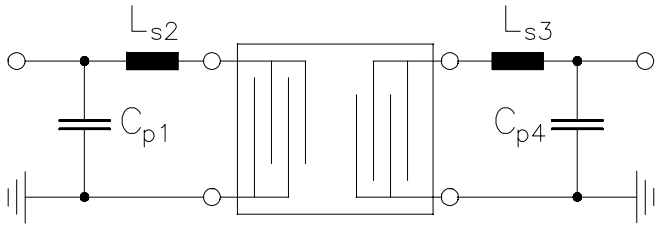
Characteristics

Operating temperature: T_A = -5 - 75 °C
Terminating source impedance: Z_S = 50 Ω and matching network
Terminating load impedance: Z_L = 50 Ω and matching network

			min.	typ.	max.	
Nominal frequency		f_N	—	248,6	—	MHz
Minimum insertion attenuation (including matching network)		α_{min}	—	8,3	9,5	dB
Amplitude ripple (p-p)		$\Delta\alpha$				
	$f_N \pm 95$ kHz		—	0,4	1,0	dB
	$f_N \pm 120$ kHz		—	0,6	1,5	dB
Passband width	$\alpha_{rel} \le 3{,}0$ dB	$B_{3,0dB}$	240	410	—	kHz
Absolute group delay (at f_N)		τ	—	2,3	3,0	µs
Group delay ripple (p-p)		$\Delta\tau$				
	$f_N \pm 95$ kHz		—	0,3	0,7	µs
	$f_N \pm 120$ kHz		—	0,4	1,0	µs
Relative attenuation (relative to α_{min})		α_{rel}				
$f_N \pm 0{,}33$ MHz ... $f_N \pm 0{,}60$ MHz			11	18,5	—	dB
$f_N \pm 0{,}60$ MHz ... $f_N \pm 0{,}80$ MHz			22	26	—	dB
$f_N \pm 0{,}80$ MHz ... $f_N \pm 3{,}00$ MHz			30	36	—	dB
$f_N - 3{,}00$ MHz ... $f_N - 105$ MHz			48	51	—	dB
$f_N - 105$ MHz ... $f_N - 120$ MHz			51	65	—	dB
$f_N + 3{,}00$ MHz ... $f_N + 13$ MHz			48	51	—	dB
$f_N + 13$ MHz ... $f_N + 30$ MHz			43	46	—	dB
$f_N + 30$ MHz ... $f_N \pm 105$ MHz			48	51	—	dB
$f_N + 105$ MHz ... $f_N + 120$ MHz			51	56	—	dB
Temperature coefficient of frequency [1]		TC_f	—	– 0,036	—	ppm/K²
Turnover temperature		T_0	—	30	—	°C

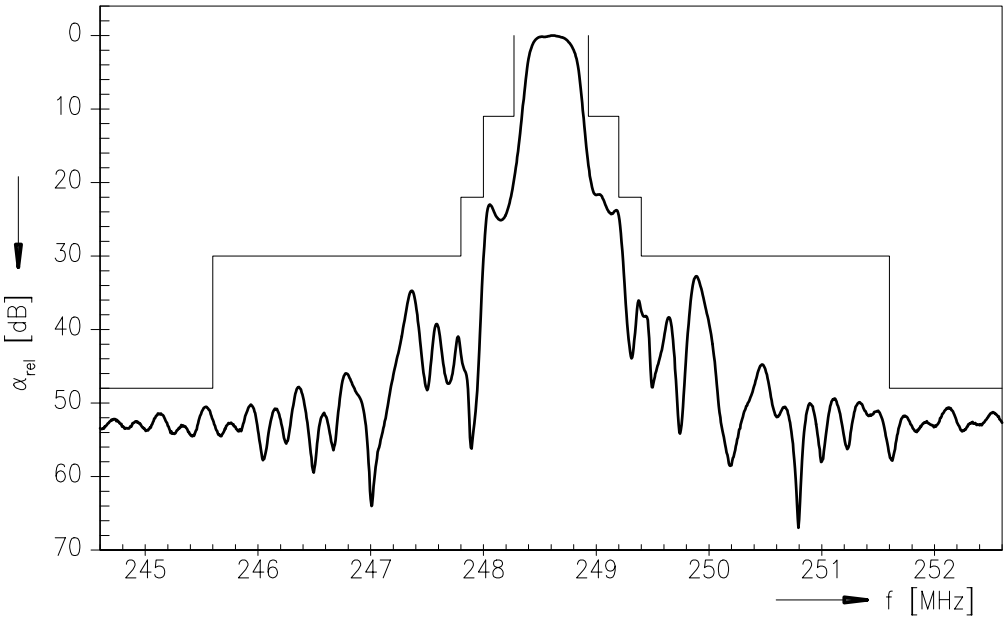
[1] Temperature dependance of f_c: $f_c(T_A) = f_c(T_0)(1 + TC_f(T_A - T_0)^2)$

Matching network

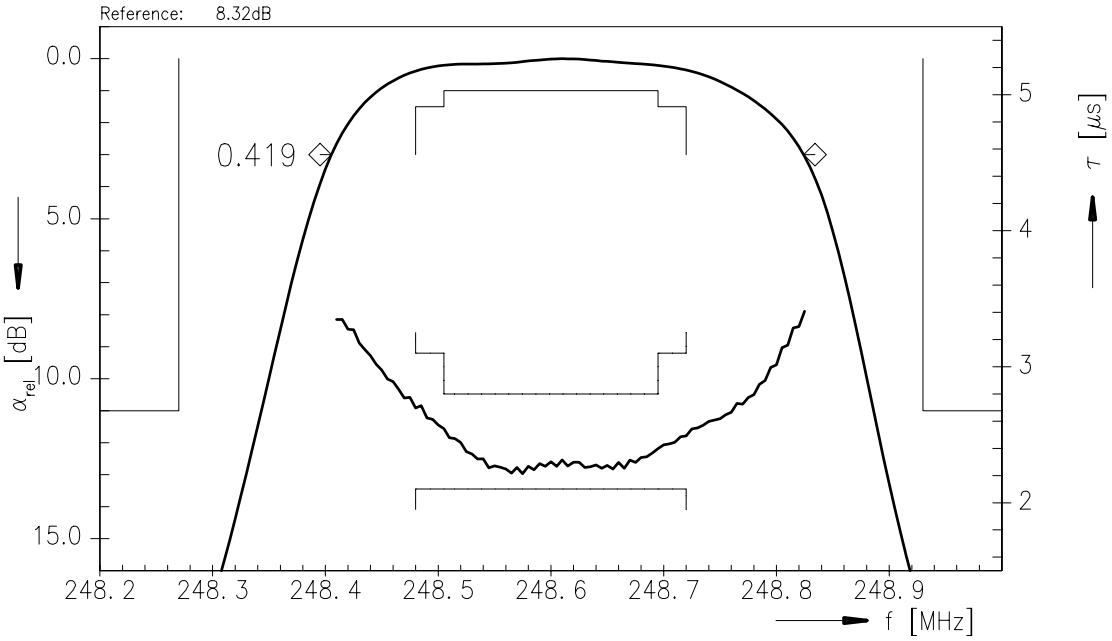


Cp1 = 22 pF
Ls2 = 22 nH
Ls3 = 22 nH
Cp4 = 22 pF

Normalized frequency response



Normalized frequency response (pass band)



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