SAW Filters for Mobile Communications

Series/Type: B7841

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39242B7841C710		2009-12-18	2010-06-30	2010-09-30

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.

TDK

SAW Components	B7841
Low-Loss Filter	**2441,75 MHz**

Data Sheet

SMD

Chip Sized Saw Package

Features

- Low-loss RF filter for bluetooth
- Usable passband 83,5 MHz
- Unbalanced to unbalanced operation
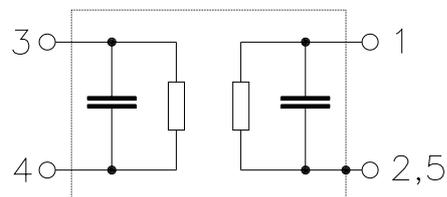- Package for **S**urface **M**ounted **T**echnology (**SMT**)

bottom view

side view

top view

Dimensions in mm, approx. weight 0,007g
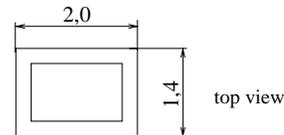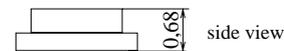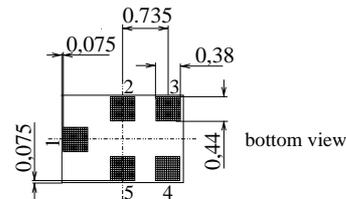
Terminals

- Ni, gold-plated

Pin configuration

1	Input, unbalanced
4	Output, unbalanced
2,5	Case ground
3	to be grounded

Type	Ordering code	Marking and Package according to	Packing according to
B7841	B39242-B7841-C710	C61157-A7-A82	F61074-V8151-Z000

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

Maximum ratings

Operable temperature range	T	– 40 /+ 85	˚C	
Storage temperature range	T_{stg}	– 40 /+ 85	˚C	
DC voltage	V_{DC}	3	V	
ESD voltage	V_{ESD}	50*	V	Machine Model, 10 pulses
Input power max. 2400...2483,5 MHz 824...915, 1710...1980 MHz	P_{IN}	6 15	dBm	source/load impedance 50Ω

* - acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses

⨂TDK

SAW Components	B7841
Low-Loss Filter	**2441,75 MHz**

Data Sheet   SMD

Characteristics
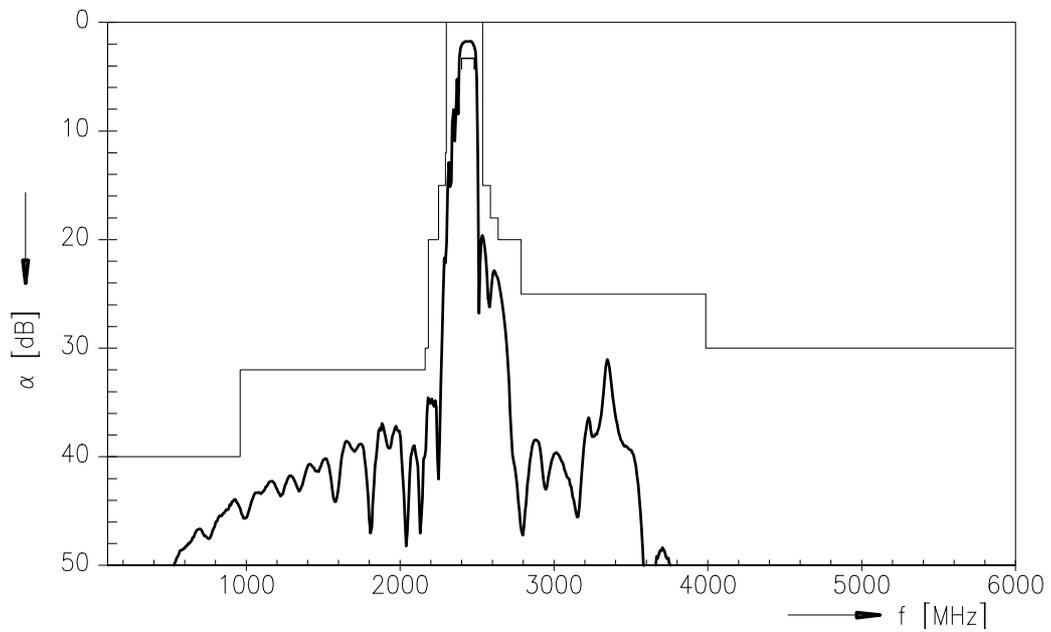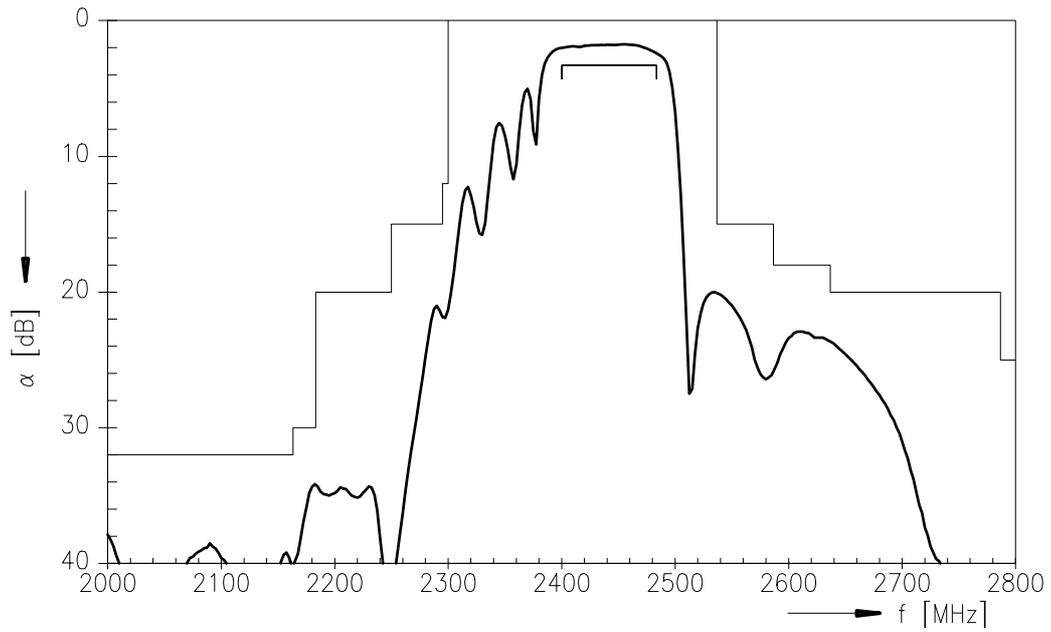
Operating temperature range: T = -40 to + 85 °C
Terminating source impedance: Z_S = 50 Ω – 1,5 nH (serial)
Terminating load impedance: Z_L = 50 Ω – 2,5 nH (serial)

		min.	typ.	max.	
Center frequency	f_c	—	2441,75	—	MHz
Maximum insertion attenuation	α_{max}				
2400,0 ... 2483,5 MHz		—	2,2	3,3	dB
Return loss					
2400,0 ... 2483,5 MHz*)		9,0	11,5	—	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
2400,0 ... 2483,5 MHz		—	0,5	1,5	dB
Attenuation	α				
100,0 ... 960,0 MHz		40	44	—	dB
960,0 ... 2150,0 MHz		32	38	—	dB
2150,0 ... 2170,0 MHz		30	36	—	dB
2170,0 ... 2250,0 MHz		20	35	—	dB
2250,0 ... 2295,0 MHz		15	21	—	dB
2295,0 ... 2300,0 MHz		12	20	—	dB
2550,0 ... 2600,0 MHz		15	20	—	dB
2600,0 ... 2650,0 MHz		18	23	—	dB
2650,0 ... 2800,0 MHz		20	24	—	dB
2800,0 ... 4000,0 MHz		25	30	—	dB
4000,0 ... 6000,0 MHz		30	50	—	dB

*) T = +25 °C

Transfer function

⚇TDK