Siemens Matsushita Components

SAW Components
Low-Loss Filter for Mobile Communication

B4826
487,0 MHz

Data Sheet

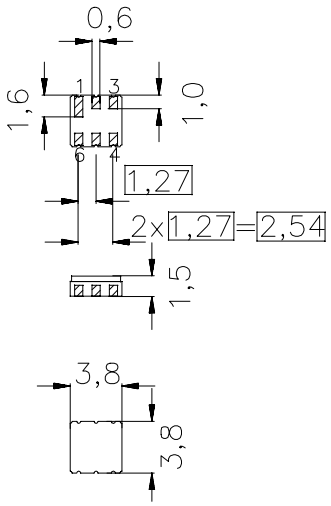
SMD ceramic package **DCC6**

Features

- Low loss IF filter for mobile phone
- Low insertion attenuation
- Ceramic Package for **S**urface **M**ounted **T**echnology (**SMT**)

Terminals

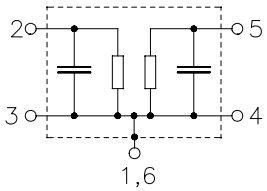
- Ni, gold-plated



Dimensions in mm, approx. weight 0,07 g

Pin configuration

2	Input
5	Output
1,3,4,6	Ground, case - ground



Type	Ordering code	Marking and Package according to	Packing according to
B4826	B39491-B4826-Z610	C61157-A7-A41	F61064-V8030-Z000

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

Maximum ratings

Operable temperature range	T	– 20/+ 75	˚C	
Storage temperature range	T_{stg}	– 40/+ 85	˚C	
DC voltage	V_{DC}	0	V	
Source power	P_s	10	dBm	

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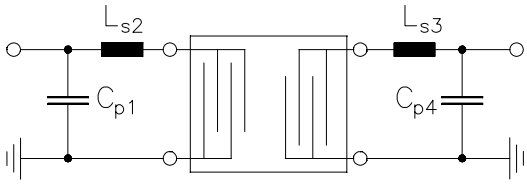
Characteristics

Operating temperature range: T = -20 ˚C to 75 ˚C
Terminating source impedance: Z_S = 520 Ω || 42 nH
Terminating load impedance: Z_L = 520 Ω || 42 nH

		min.	typ.	max.	
Nominal frequency	f_N	—	487,00	—	MHz
Maximum insertion attenuation (excluding losses in matching network)	α_{min}	—	2,0	3,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
f_N - 150,0 kHz ... f_N + 150,0 kHz		—	0,5	1,0	dB
Group delay ripple (p-p)	$\Delta\tau$				
f_N - 150,0 kHz ... f_N + 150,0 kHz		—	0,1	0,4	µs
Attenuation	α				
0,10 MHz ... f_N - 8,00 MHz		30	32	—	dB
f_N - 8,00 MHz ... f_N - 3,00 MHz		25	28	—	dB
f_N + 3,00 MHz ... f_N + 3,30 MHz		25	28	—	dB
f_N + 3,30 MHz ... f_N + 6,50 MHz		18	20	—	dB
f_N + 6,50 MHz ... f_N + 8,00 MHz		25	29	—	dB
f_N + 6,50 MHz ... f_N + 10,50 MHz		23	25	—	dB
f_N + 10,50 MHz ... 1000,00 MHz		30	34	—	dB
Impedance at f_N					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	520 || 2,5	—	Ω || pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	520 || 2,5	—	Ω || pF
Temperature coefficient of frequency [1]	TC_f	—	– 0,03	—	ppm/K^2
Turnover temperature	T_0	—	– 24	—	˚C

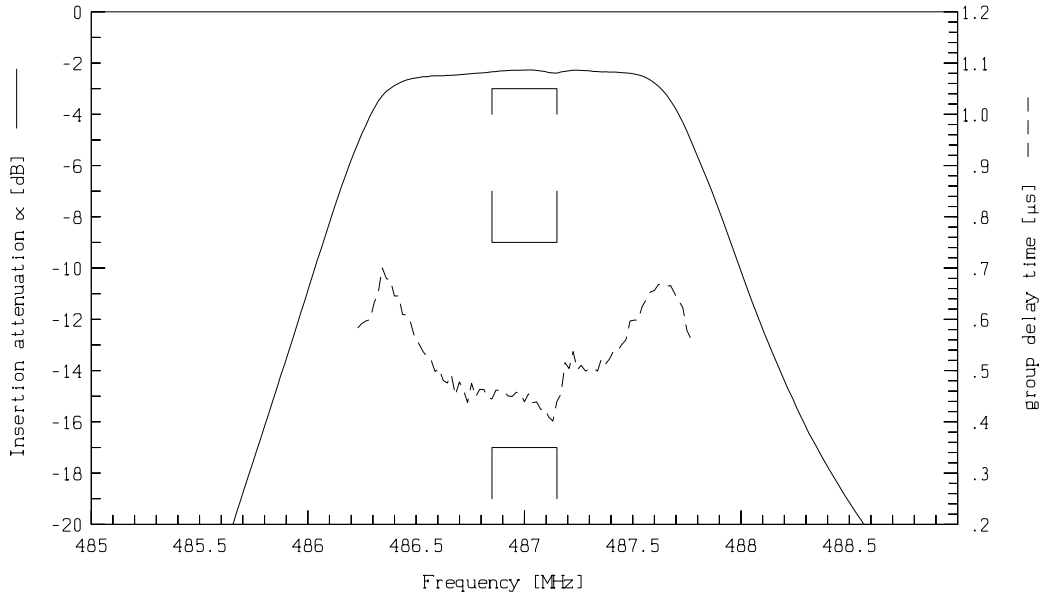
[1] Temperature dependance of center frequency f_c: $f_c(T) = f_c(T_0)(1 + TC_f(T - T_0)^2)$

Matching network to 50 Ω (element values depend on pcb layout)



Data Sheet

Transfer function



Transfer function (wideband)