



Siemens Matsushita Components

**SAW Components**  
**Low-Loss Filter for Mobile Communication**

**B4826**  
**487,0 MHz**

**Data Sheet**

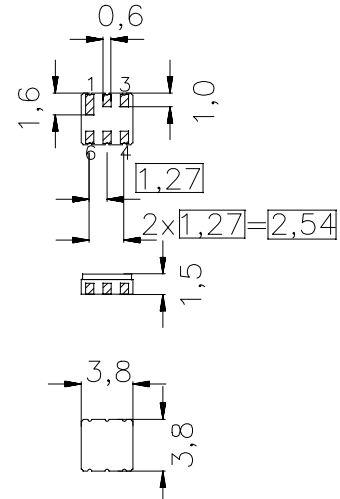
SMD ceramic package **DCC6**

**Features**

- Low loss IF filter for mobile phone
- Low insertion attenuation
- Ceramic Package for **Surface Mounted Technology (SMT)**

**Terminals**

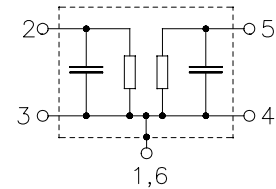
- Ni, gold-plated



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 Sensitive Device (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:  $T = -20\text{ °C to }75\text{ °C}$   
 Terminating source impedance:  $Z_S = 520\ \Omega \parallel 42\text{ nH}$   
 Terminating load impedance:  $Z_L = 520\ \Omega \parallel 42\text{ nH}$

		min.	typ.	max.	
<b>Nominal frequency</b>	$f_N$	—	487,00	—	MHz
<b>Maximum insertion attenuation</b> (excluding losses in matching network)	$\alpha_{min}$	—	2,0	3,0	dB
<b>Amplitude ripple (p-p)</b> $f_N - 150,0\text{ kHz} \dots f_N + 150,0\text{ kHz}$	$\Delta\alpha$	—	0,5	1,0	dB
<b>Group delay ripple (p-p)</b> $f_N - 150,0\text{ kHz} \dots f_N + 150,0\text{ kHz}$	$\Delta\tau$	—	0,1	0,4	$\mu\text{s}$
<b>Attenuation</b>	$\alpha$				
0,10 MHz ... $f_N - 8,00\text{ MHz}$		30	32	—	dB
$f_N - 8,00\text{ MHz} \dots f_N - 3,00\text{ MHz}$		25	28	—	dB
$f_N + 3,00\text{ MHz} \dots f_N + 3,30\text{ MHz}$		25	28	—	dB
$f_N + 3,30\text{ MHz} \dots f_N + 6,50\text{ MHz}$		18	20	—	dB
$f_N + 6,50\text{ MHz} \dots f_N + 8,00\text{ MHz}$		25	29	—	dB
$f_N + 8,00\text{ MHz} \dots f_N + 10,50\text{ MHz}$		23	25	—	dB
$f_N + 10,50\text{ MHz} \dots 1000,00\text{ MHz}$		30	34	—	dB
<b>Impedance at <math>f_N</math></b>					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	520 $\parallel$ 2,5	—	$\Omega \parallel \text{pF}$
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	520 $\parallel$ 2,5	—	$\Omega \parallel \text{pF}$
<b>Temperature coefficient of frequency</b> <sup>1)</sup>	$TC_f$	—	-0,03	—	ppm/K <sup>2</sup>
<b>Turnover temperature</b>	$T_0$	—	-24	—	°C

<sup>1)</sup> Temperature dependance of center frequency  $f_c$ :  $f_c(T) = f_c(T_0)(1 + TC_f(T - T_0)^2)$



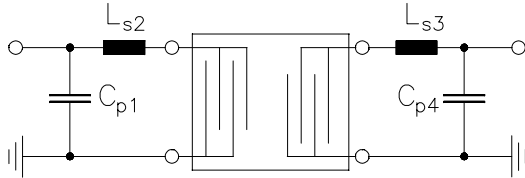
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## Data Sheet

Matching network to 50  $\Omega$  (element values depend on pcb layout)



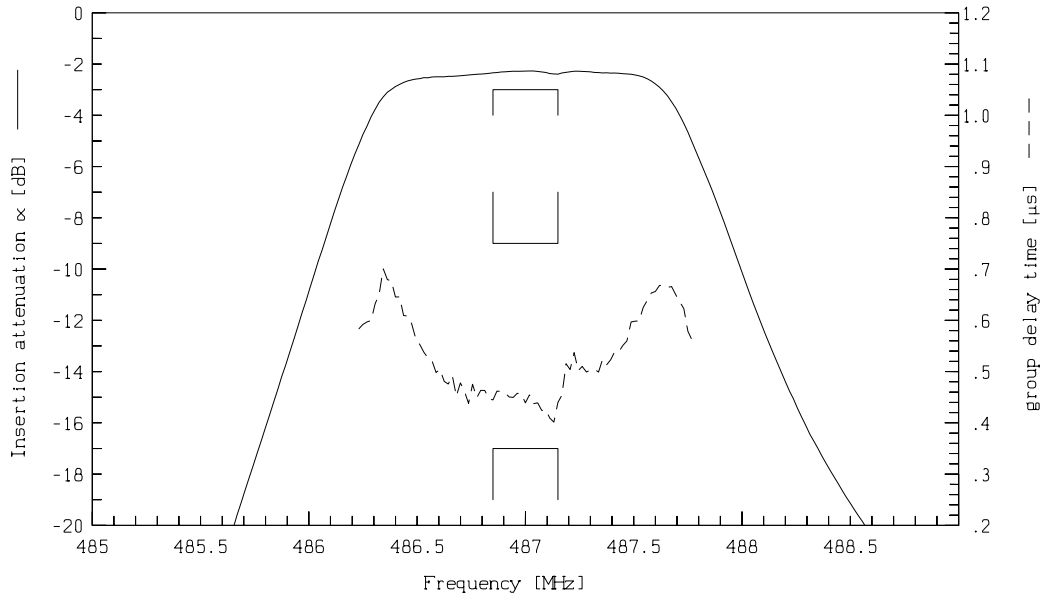


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## Data Sheet

### Transfer function



### Transfer function (wideband)

