

### **Siemens Matsushita Components**

# SAW Components Low Loss Filter for Mobile Communication

B4126 1747,5 MHz

#### **Data Sheet**

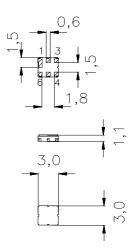
#### Ceramic package DCC6C

#### **Features**

- Low-loss RF filter for mobile telephone PCN system, transmit path
- High selectivity
- Usable passband: 75 MHz
- No matching network required for operation at 50  $\Omega$
- Ceramic Package for Surface Mounted Technology (SMT)

#### **Terminals**

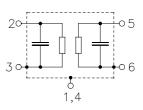
Ni, gold-plated



Dimensions in mm, approx. weight 0,037 g

### Pin configuration

Input
Input - ground
Output
Output - ground
To be grounded



Туре	Ordering code	Marking and Package according to	Packing according to
B4126	B39172-B4126-U410	C61157-A7-A67	F61074-V8088-Z000

Electrostatic Sensitive Device (ESD)

#### **Maximum ratings**

Operable temperature range	Т	<b>- 20 / + 70</b>	°C	
Storage temperature range	$T_{stg}$	<b>- 40 / + 85</b>	°C	
DC voltage	$V_{\rm DC}$	0	V	
Input power max.				source and load impedance 50 $\Omega$
1710 1785 MHz	$P_{IN}$	5	dBm	peak power of GSM signal,
				duty cycle 1:8
elsewhere		0	dBm	continuous wave



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#### **Characteristics**

Operating temperature range:  $T=25+2^{\circ}\text{C}$ Terminating source impedance:  $Z_{\text{S}}=50~\Omega$ Terminating load impedance:  $Z_{\text{L}}=50~\Omega$ 

				min.	typ.	max.	
Center frequency			f <sub>C</sub>	_	1747,5	_	MHz
Maximum insertion attenuation		$\alpha_{max}$					
1710,0	1785,0	MHz		_	3,5	4,0	dB
Amplitude ripple (p-p)			Δα				
1710,0	1785,0	MHz		_	2,0	2,5	dB
Input VSWR							
1710,0	1785,0	MHz		_	2,3	2,5	
Output VSWR							
1710,0	1785,0	MHz		_	2,3	2,5	
Attenuation			α				
10,0	1670,0	MHz		15,0	18,0	_	dB
1670,0	1690,0	MHz		10,0	25,0	_	dB
1805,0	1880,0	MHz		10,0	16,0	_	dB
1880,0	4500,0	MHz		15,0	21,0	_	dB
4500,0	5200,0	MHz		10,0	19,0	_	dB

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Data Sheet

#### **Characteristics**

Operating temperature range:

T = -20 to +70° C  $Z_S$  = 50  $\Omega$   $Z_L$  = 50  $\Omega$ Terminating source impedance: Terminating load impedance:

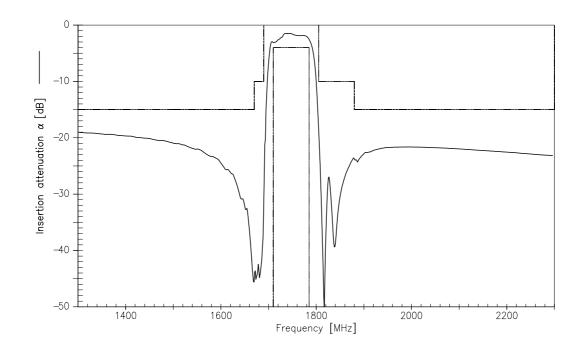
				min.	typ.	max.	
Center frequency			f <sub>C</sub>	_	1747,5	_	MHz
Maximum insertion attenuation			$\alpha_{max}$				
1710,0	.1785,0	MHz		_	3,5	4,0	dB
Amplitude ripple (p-p)			Δα				
1710,0	.1785,0	MHz		_	2,0	2,5	dB
Input VSWR							
1710,0	.1785,0	MHz		_	2,3	2,5	
Output VSWR							
1710,0	.1785,0	MHz		_	2,3	2,5	
Attenuation			α				
10,0	.1670,0	MHz		15,0	18,0		dB
1670,0	.1690,0	MHz		6,0	17,0	_	dB
1805,0	.1880,0	MHz		6,0	12,0	_	dB
1880,0	.4500,0	MHz		15,0	21,0	_	dB
4500,0	.5200,0	MHz		10,0	19,0	_	dB



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Data Sheet Transfer function (spec for 25°C)



### **Transfer function (wideband)**

