

**Siemens Matsushita Components** 

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

#### Data Sheet

Features

# 1747,5 MHz

B4126

#### Ceramic package **DCC6C**

- 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**

2	Input
3	Input - ground
5	Output
6	Output - ground
1, 4	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	- 20 / + 70	°C	
Storage temperature range	T <sub>sta</sub>	– 40 / + 85	°C	
DC voltage	V <sub>DC</sub>	0	V	
Input power max.				source and load impedance 50 $\Omega$
1710 1785 MHz	P <sub>IN</sub>	5	dBm	peak power of GSM signal,
				duty cycle 1:8
elsewhere		0	dBm	continuous wave

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#### **Characteristics**

Operating temperature range:	Т	= 25 +- 2°C
Terminating source impedance:	$Z_{S}$	= 50 Ω
Terminating load impedance:	$Z_{L}$	= 50 Ω

				min.	typ.	max.	
Center frequency			f <sub>c</sub>		1747,5		MHz
Maximum insertion attenuation 1710,0	<b>on</b> 1785,0	MHz	$lpha_{max}$	_	3,5	4,0	dB
Amplitude ripple (p-p)	1785 0	MH7	Δα	_	2.0	25	dB
Input VSWP		101112			2,0	2,0	
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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#### **Characteristics**

Operating temperature range:	Т	= -20 to +70°C
Terminating source impedance:	$Z_{S}$	= 50 Ω
Terminating load impedance:	$Z_{L}$	= 50 Ω

				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



#### SAW Components Low Loss Filter for Mobile Communication

Data Sheet Transfer function (spec for 25°C)



Transfer function (wideband)



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