



SAW Components

SAW RF filter for base stations TD-LTE

Series/type:	B5185
Ordering code:	B39262B5185U410
Date:	April 26, 2013
Version:	2.0

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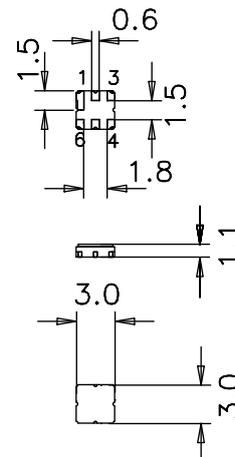
Data sheet

Application

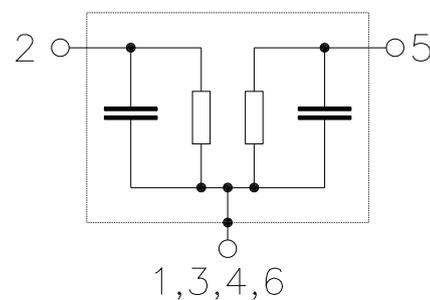
- Low-Loss TD-LTE RF filter for base station
- Unbalanced to unbalanced operation
- Usable passband 40MHz


Features

- Package size 3.0 x3.0 x 1.1 mm³
- Package code DCC6C
- RoHS compatible
- Approximate weight 0.037 g
- Ceramic Package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- **Electrostatic Sensitive Device (ESD)**
- **Moisture Sensitive Level 1**
- Filter Surface Passivated


Pin configuration

- 2 Input
- 5 Output
- 1,3,4,6 Case grounded



Data sheet


Characteristics

Temperature range for specification: $T = -40\text{ °C to }+85\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	2595.00	—	MHz
Maximum insertion attenuation	α_{\max}	—	1.6	2.4	dB
2575.0 ... 2615.0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.4	1.0	dB
2575.0 ... 2615.0 MHz					
VSWR		—	1.5	2.0	
Absolute attenuation	α_{abs}				
50.0 ... 2300.0 MHz		25	31	—	dB
2300.0 ... 2510.0 MHz		23	27	—	dB
2667.0 ... 2670.0 MHz		20	46	—	dB
2670.0 ... 2690.0 MHz		28	37	—	dB
2700.0 ... 3000.0 MHz		26	37	—	dB
3000.0 ... 5400.0 MHz		20	23	—	dB

Maximum ratings

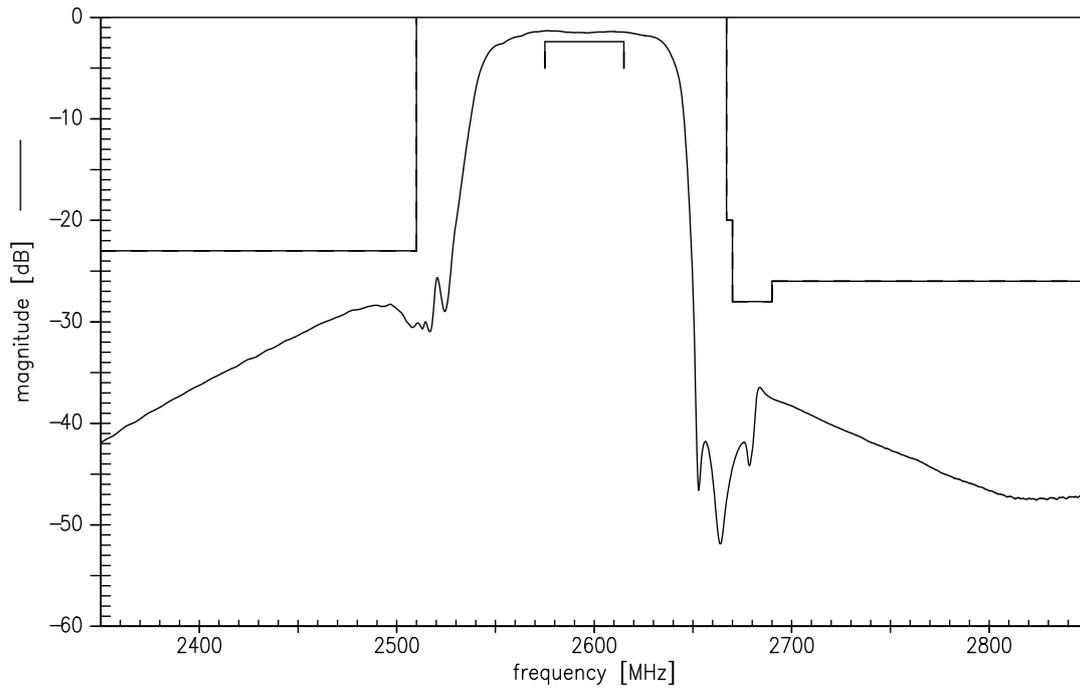
Operable temperature range	T	-40/+85	°C	
Storage temperature range	T _{stg}	-40/+85	°C	
DC voltage	V _{DC}	6	V	
ESD voltage	V _{ESD}	50 ¹⁾	V	machine model, 10 pulses
Input power at 2575.0 ... 2615.0 MHz	P _{IN}	20	dBm	100,000 hours, CW@85°C

¹⁾ acc. to JESD22-A115B (machine model), 10 negative & 10 positive pulses.

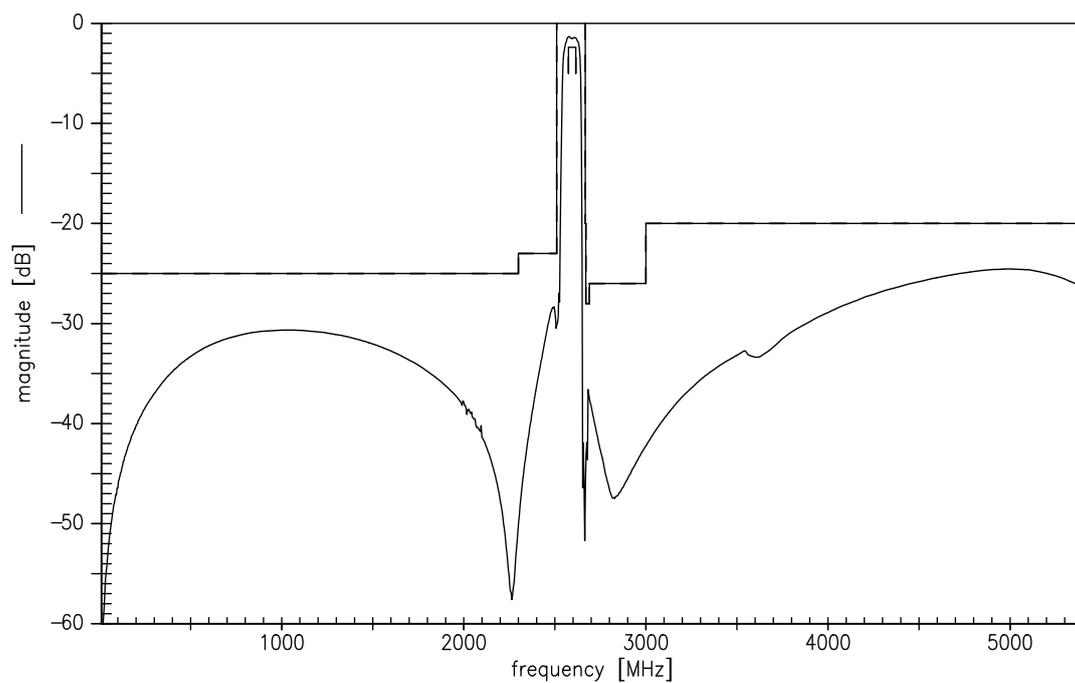
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SMD

Transfer function (Narrowband)



Transfer function (wideband)



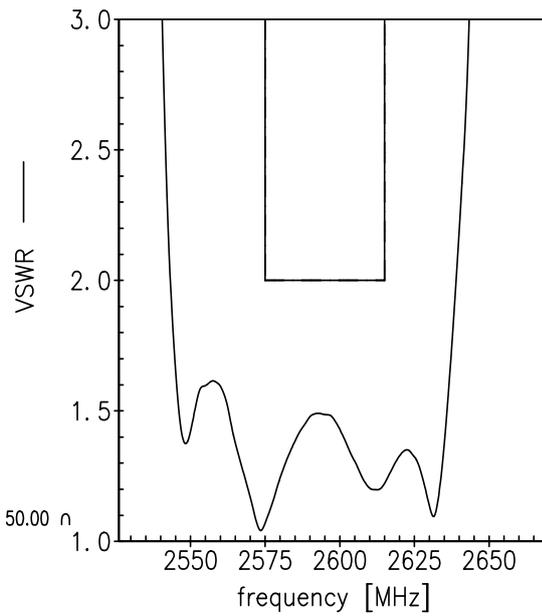
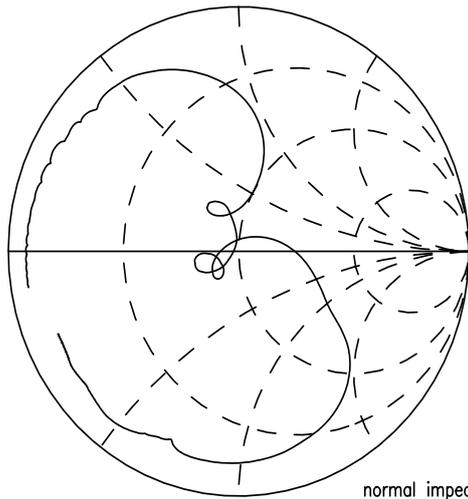
Please read *cautions and warnings* and *important notes* at the end of this document.

Data sheet

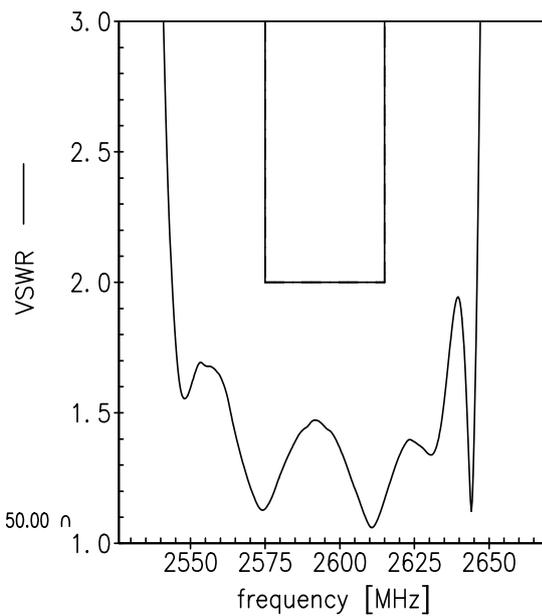
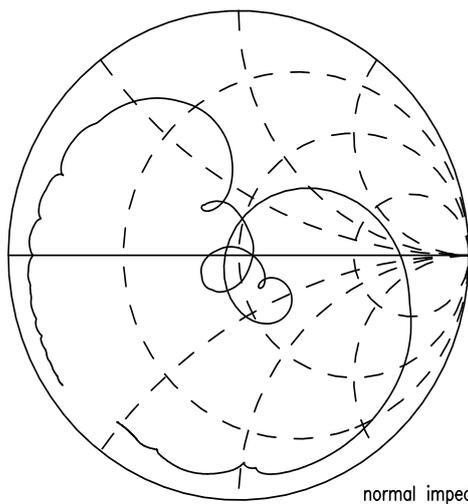
SMD

Smith charts

S₁₁ function



S₂₂ function



SAW Components	B5185
SAW RF filter	2595.00 MHz

Data sheet



References

Type	B5185
Ordering code	B39262B5185U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8228-Z000
Date codes	L_1126
S-parameters	B5185_NB.s2p, B5185_WB.s2p See file header for port/pin assignment table
Soldering profile	S_6001
RoHS compatible	RoHS-compatible means that products are compatible with the requirements according to Art. 4 (substance restrictions) of Directive 2011/65/EU of the European Parliament and of the Council of June 8th, 2011, on the restriction of the use of certain hazardous substances in electrical and electronic equipment ("Directive") with due regard to the application of exemptions as per Annex III of the Directive in certain cases.
Matching coils	See Inductor pdf-catalog http://www.tdk.co.jp/tefe02/coil.htm#aname1 and Data Library for circuit simulation http://www.tdk.co.jp/etvcl/index.htm for a large variety of matching coils.

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