

SAW Components

SAW RF filter

Short range devices

Series/type: B3588

Ordering code: B39921B3588U410

Date: August 21, 2008

Version: 2.3

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SAW Components B3588

SAW RF filter 915.00 MHz

Data sheet



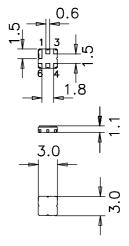
Application

- Low-loss RF filter for remote control receivers
- lacktriangle No matching network required for operation at 50 Ω



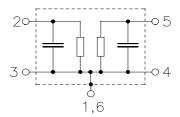
Features

- Package size 3.0 x 3.0 x 1.1 mm³
- Package code DCC6C
- RoHS compatible
- Approximate weight 0.037 g
- Package for Surface Mount Technology (SMT)
- Ni, gold-plated terminals
- Lead free soldering compatible with J STD20C
- AEC-Q200 qualified component family
- Electrostatic Sensitive Device (ESD)



Pin configuration

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





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Data sheet = MD

Characteristics

Temperature range for specification: $T = 0 \,^{\circ}C \text{ to } +70 \,^{\circ}C$

Terminating source impedance: $Z_S = 50 \Omega$ Terminating load impedance: $Z_L = 50 \Omega$

		min.	typ. @ 25 °C	max.	
Center frequency	f _C	_	915.00	_	MHz
Maximum insertion attenuation	α_{max}				
902.00 928.00 MHz		_	2.9	3.3	dB
Amplitude ripple (p-p)	$\Delta \alpha$				
902.00 928.00 MHz		_	0.9	1.5	dB
Attenuation (relative to α_{max})	α_{rel}				
10.00 800.00 MHz		50	55	<u> </u>	dB
800.00 845.00 MHz		45	50		dB
845.00 880.00 MHz		35	43	<u> </u>	dB
947.00 992.00 MHz		15	22	_	dB
992.00 1020.00 MHz		35	45		dB
1020.00 1200.00 MHz		45	50	_	dB
Temperature coefficient of frequency	TC _f		-30	_	ppm/K



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Data sheet

Characteristics

 $T = -40 ^{\circ}C \text{ to } +85 ^{\circ}C$ Temperature range for specification:

 $Z_S = 50 \Omega$ $Z_L = 50 \Omega$ Terminating source impedance: Terminating load impedance:

		min.	tvn	may	
		111111.	typ. @ 25 °C	max.	
Center frequency	f _C	_	915.00	_	MHz
Maximum insertion attenuation	α_{max}				
902.00 928.00 MHz	⊶max	_	2.9	3.5	dB
Amplitude ripple (p-p)	Δα				
902.00 928.00 MHz		_	0.9	1.8	dB
Attenuation (relative to α_{max})	α.				
10.00 800.00 MHz	$lpha_{rel}$	50	55		dB
800.00 845.00 MHz		45	50	_	dB
845.00 880.00 MHz		33	43	_	dB
947.00 992.00 MHz		13	22	_	dB
992.00 1020.00 MHz		35	45	_	dB
1020.00 1200.00 MHz		45	50	_	dB
Temperature coefficient of frequency	TC _f	_	-30	_	ppm/K

Maximum ratings

Operable temperature range	Т	-45/+125	°C	
Storage temperature range	T_{stg}	-45/+125	°C	
DC voltage	V_{DC}	5	V	
Source power	P_S	15	dBm	source impedance 50 Ω
Source power 902 MHz to 928 MHz	P_S	18	dBm	duty cycle 1:10, -40 °C to +85 °C



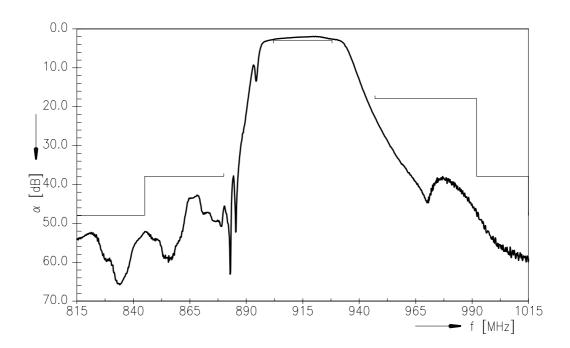
SAW Components

SAW RF filter

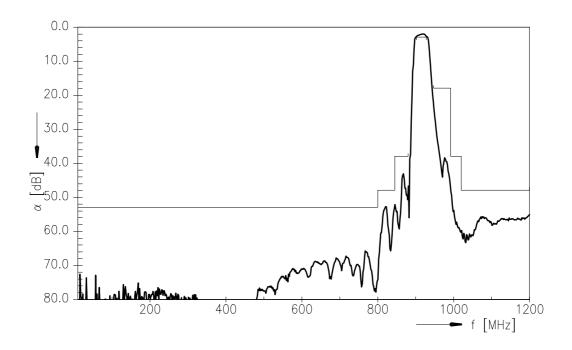
915.00 MHz

Data sheet

Transfer function



Transfer function (wideband)





	B3588
SAW RF filter	915.00 MHz

Data sheet



References

Туре	B3588
Ordering code	B39921B3588U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B3588_NB.s2p B3588_WB.s2p
Soldering profile	S_6001
RoHS compatible	defined as compatible with the following documents: "DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment. 2005/618/EC from April 18th, 2005, amending Directive 2002/95/EC of the European Parliament and of the Council for the purposes of establishing the maximum concentration values for certain hazardous substances in electrical and electronic equipment."

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