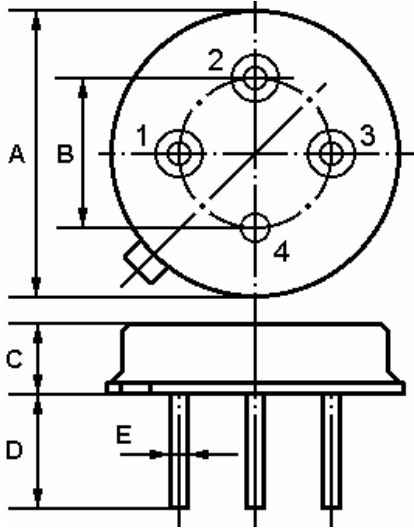


The **ACTF14-59/914.5-959.5/TO39** is a low-loss, compact and economical surface-acoustic-wave (SAW) filter in a low-profile metal **TO-39** case. It is designed as RF duplexer for cordless telephone CT1. Centre frequency is **914.500 / 959.500** MHz.

1. Package Dimension (TO-39)

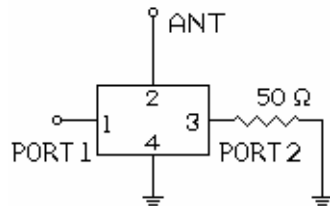


2.

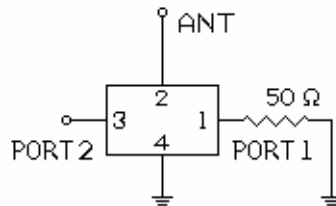
Pin	Configuration
1	Port 1 / Port 2
2	Antenna
3	Port 2 / Port 1
4	Case Ground

Dimensions	Data (Unit: mm)
A	9.35±0.10
B	5.08±0.10
C	3.40±0.10
D	3.00±0.20
E	0.45±0.20

3. Test Circuit



Between Port1 and Antenna



Between Port2 and Antenna

In keeping with our ongoing policy of product evolution and improvement, the above specification is subject to change without notice.

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<http://www.actcrystals.com>

4. Features

- Compact RF duplexer for cordless telephone CT1
- High stability and reliability with good performance
- No matching network required for operation at 50 Ω

5. Performance

5-1. Maximum Ratings

Item	Symbol	Rating	Units
Input Power	P_{in}	15	dBm
DC Voltage	V_{DC}	3	V
Operating Temperature Range	T_A	-10 ~ +60	°C
Storage Temperature Range	T_{stg}	-40 ~ +85	°C

5-2. Electronic Characteristics

Characteristic	Symbol	Minimum	Typical	Maximum	Units
Centre frequency	f_c				
Port 1		--	959.500	--	MHz
Port 2		--	914.500	--	MHz
Insertion loss	IL				
Port 1: 959.000...960.000 MHz		--	3.5	4.5	dB
Port 2: 914.000...915.000 MHz		--	3.5	4.5	dB
Amplitude ripple(p-p)	$\Delta\alpha$				
Port 1: 959.000...960.000 MHz		--	0.7	2.0	dB
Port 2: 914.000...915.000 MHz		--	0.7	2.0	dB
Absolute attenuation Port 1 914.000...915.000 MHz	α	30	35	--	dB
Absolute attenuation Port 2 959.000...960.000 MHz	α	30	35	--	dB
Temperature coefficient of frequency	TC_f	--	-30	--	ppm/K

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ⓘ CAUTION: Electrostatic Sensitive Device. Observe precautions for handling!

1. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture that is connected to a $50\ \Omega$ test system with $VSWR \leq 1.2:1$. The test fixture L and C are adjusted for minimum insertion loss at the filter centre frequency, f_c . Note that insertion loss, bandwidth, and passband shape are dependent on the impedance matching component values and quality.
2. Unless noted otherwise, specifications apply over the entire specified operating temperature range.
3. The specifications of this device are based on the test circuit shown above and subject to change or obsolescence without notice.
4. All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.
5. Our liability is only assumed for the Surface Acoustic Wave (SAW) component(s) per se, not for applications, processes and circuits implemented within components or assemblies.

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