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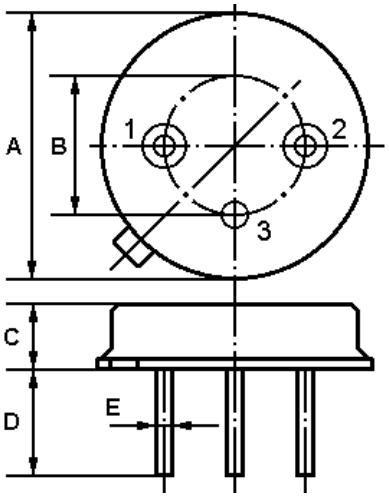
The ACTF480-1/480.0/TO39-2 is a one channel IF filter for DSB receivers with constant group delay.

1.Package Dimension (TO-39)

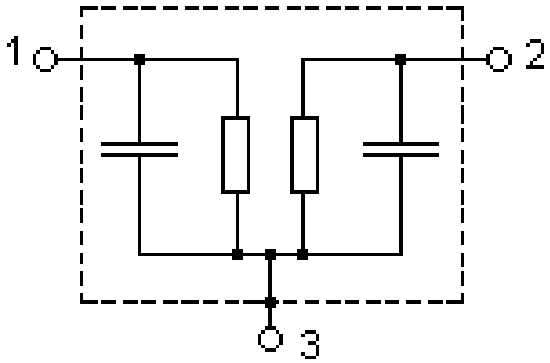


2,

Pin	Configuration
1	Input / Output
2	Output / Input
3	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	Φ0.45±0.20

3.Equivalent LC Model



For quotations or further information please contact us at:
3 The Business Centre, Molly Millars Lane, Wokingham, Berks, RG41 2EY, UK
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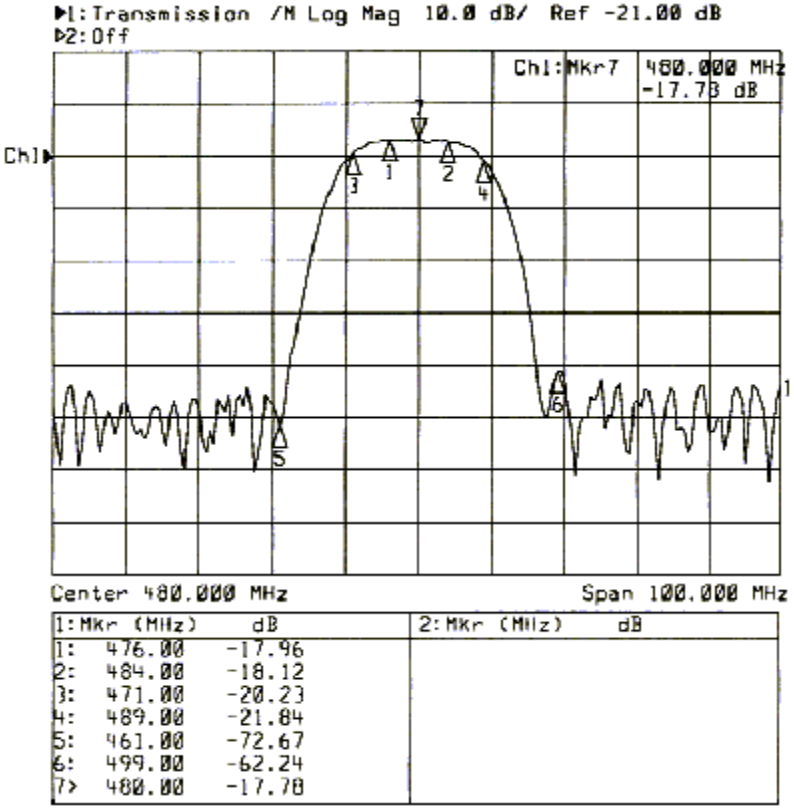
4.Typical Frequency Response



5.Performance

5-1.Maximum Ratings

Rating		Value	Units
AC Voltage Between Any Two Pins	V_{pp}	5	V
DC Voltage Between Any Two Pins	V_{DC}	0	V
Storage temperature range	T_{stg}	-40 to +85	°C
Operable temperature range	T_A	-25 to +85	°C

5-2.Electronic Characteristics

Reference temperature: $T_A = 25$ °C

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

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

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

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Characteristic			Min.	Typ.	Max.	Units
Centre Frequency		f_C	479.00	480.00	481.00	MHz
Insertion attenuation (Reference level for the following data)	480.00 MHz	α	--	21	23.0	dB
Pass bandwidth	α_{rel}≤3dB	B_{3dB}	16.60	17.80	18.60	MHz
Relative attenuation		α_{rel}				
	471.00 MHz		--	3.4	5.4	dB
	489.00 MHz		--	3.0	5.4	dB
Lower sidelobe	430.00 ….461.00 MHz		38.0	50.0	--	dB
Upper sidelobe	499.00 … 530.00 MHz		38.0	45.0	--	dB
Reflected wave signal suppression 0.13µs … 2.0µs after main pulse			40.0	46.0	--	dB
Amplitude ripple (p-p)	476.00 … 484.00 MHz	Δ α	--	0.6	1.0	dB
Group delay (aperture 0.25MHz)	480.00 MHz	t	--	281.0	--	ns
Group delay ripple (p-p)	471.50 … 488.50 MHz	Δ t	--	11.5	18.0	ns
Temperature coefficient of frequency		TC_f	--	-94	--	ppm/K

CAUTION: Electrostatic Sensitive Device. Observe precautions for handling!

1. The frequency f_C is defined as the midpoint between the 3dB frequencies.
2. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture that is connected to a 50Ω test system with VSWR≤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.
3. Unless noted otherwise, specifications apply over the entire specified operating temperature range.
4. The specifications of this device are based on the test circuit shown above and subject to change or obsolescence without notice.
5. All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.
6. 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.