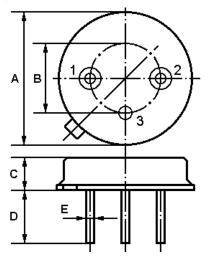


# The ACTF480-3/480.0/TO39-2 is a one channel IF filter for DSB receivers with constant group delay.

2.

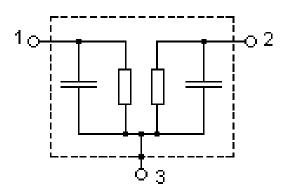
1.Package Dimension (TO-39)



Pin	Configuration				
1	Input / Output				
2	Output / Input				
3	Case Ground				
Dimensions	Data (Unit: mm)				
A	9.35±0.10				

<i>/</i> \	0.00±0.10			
В	5.08±0.10			
С	3.40±0.10			
D	3.00±0.20			
E	Ф0.45±0.20			

3.Equivalent LC Model



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

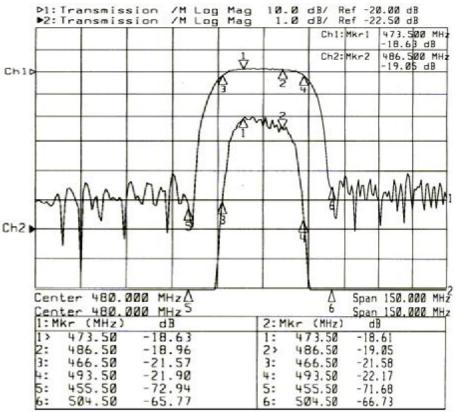
ISO9001: 2000 Registered - Registration number 6830/2 For quotations or further information please contact us at: 3 The Business Centre, Molly Millars Lane, Wokingham, Berks, RG41 2EY, UK <u>http://www.actcrystals.com</u>

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Tel : +44 118 979 1238 Fax : +44 118 979 1283 Email: <u>info@actcrystals.com</u>

#### **4.Typical Frequency Response**



#### 5.Performance

#### 5-1.Maximum Ratings

Rating		Value	Units
AC Voltage Between Any Two Pins	V <sub>PP</sub>	5	V
DC Voltage Between Any Two Pins	V <sub>DC</sub>	0	V
Storage temperature range	T <sub>stg</sub>	-40 to +85	°C
Operable temperature range	T <sub>A</sub>	-25 to +85	°C

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5-2.Electronic	Characteristics

Reference temperature:	T <sub>A</sub> = 25 °C
Terminating source impedance:	$Z_{\rm S} = 50 \ \Omega$
Terminating load impedance:	$Z_L = 50 \Omega$
Group delay aperture:	0.25MHz

CI	naracteristic		Min.	Typical	Max.	Units
Centre Frequency		f <sub>c</sub>	479.00	480.00	481.00	MHz
Insertion attenuation (Reference level for the fol	480.00 MHz llowing data)	α		22.5	24	dB
Pass bandwidth	α <sub>rel</sub> ≤3dB	B <sub>3dB</sub>	25.6	26.6	27.6	MHz
Relative attenuation Lower sidelobe Upper sidelobe	466.50 MHz 493.50 MHz 430.00455.50 MHz 504.50 530.00 MHz	α <sub>rel</sub>	  40.0 38.0	3.0 3.2 46.0 43.0	4.6 4.6  	dB dB dB dB
<b>Reflected wave signal suppression</b> 0.15µs 2.0µs after main pulse		40.0	46.0		dB	
Amplitude ripple (p-p)	473.50 486.50 MH	z Δα		0.6	1.0	dB
Group delay	480.00 MHz	t		227.5		ns
Group delay ripple (p-p)	467.00 493.00 MH	z ∆ <i>t</i>		8.5	15	ns
Temperature coefficient of frequency TC <sub>f</sub>			-86		ppm/K	

## **İ** CAUTION: Electrostatic Sensitive Device. Observe precautions for handling!

- 1. The frequency  $f_C$  is defined as the midpoint between the 3dB frequencies.
- 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<sub>C</sub>. 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.

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

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