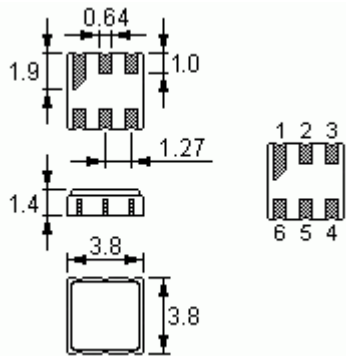
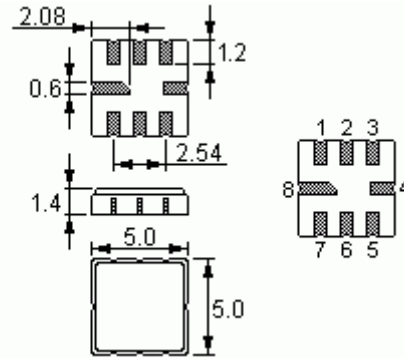


This specification is applied to SAW filters **ACTF2012-147.0-QCC8C** (147MHz), **ACTF2005-155.0-QCC8C**(155MHz), **ACTF2006-163.0-QCC8C** (163MHz), **ACTF2021-171.0-QCC8C** (171MHz), **ACTF378-281.0-QCC8C** (281MHz), **ACTF0031-930.5-QCC8C** (930.5MHz) in a **QCC8C** case and **ACTF9059-930.5-DCC** (930.5MHz) in a **DCC6** case for pager applications.

1. Package Dimension

QCC8C→

Pin	Configuration
2	Input / Output
6	Output / Input
1, 3, 5, 7	To be Grounded
4, 8	Case Ground

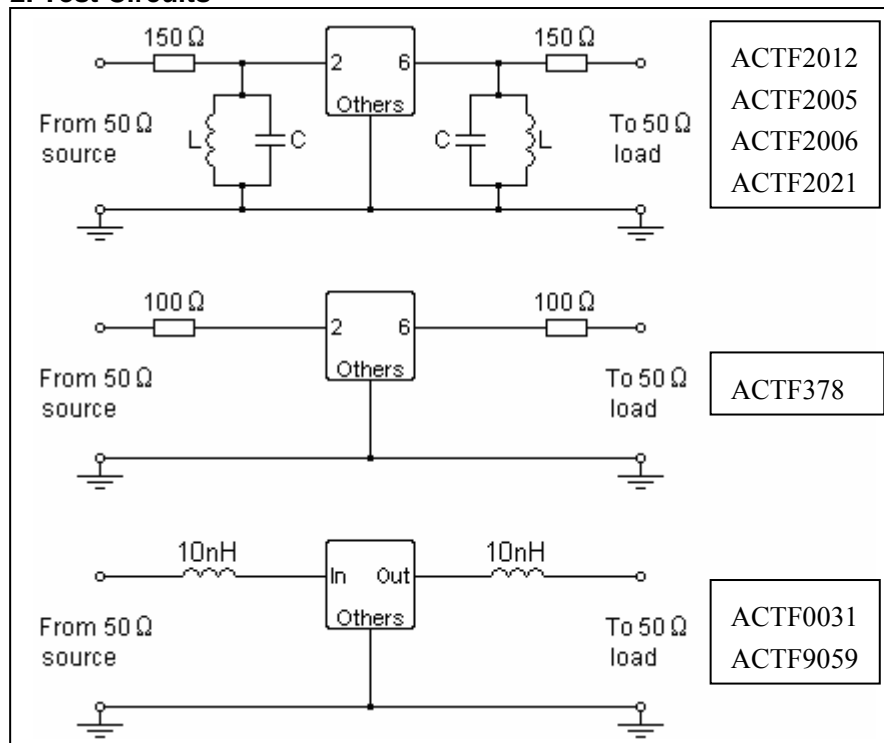


←DCC6 (only for ACTF9059)

Pin	Configuration
2	Input / Output
5	Output / Input
1, 3, 4, 6	Ground

Unit: mm

2. Test Circuits



In line with our ongoing policy of product evolution and improvement, the above specification may subject to change without notice

ISO9001:2000 Registered

For quotations or further information please contact us at:

3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK

<http://www.actcrystals.com>

3. Performance

3-1. Maximum Ratings

Rating		Value
DC Voltage	V_{DC}	+15 V max.
AC Voltage	V_{PP}	10V 50Hz / 60Hz
Operation temperature	T_A	-10°C +65°C
Storage temperature	T_{stg}	-45°C +85°C
RF Power Dissipation	P	0 dBm

3-2. Electrical characteristics

Item	NDF2012	NDF2005	NDF2006	NDF2021	NDF378	Unit
Center Frequency	147.0	155.0	163.0	171.0	281.0	MHz
Insertion Loss						
$f_C - 100.0\text{MHz}$ to $f_C - 46.8\text{MHz}$	50 min.	50 min.	50 min.	50 min.	50 min.	dB
$f_C - 46.8\text{MHz}$ to $f_C - 38.8\text{MHz}$	50 min.	50 min.	50 min.	50 min.	50 min.	dB
$f_C \pm 4.0\text{MHz}$	6.5 max.	6.5 max.	6.5 max.	6.5 max.	4.5 max.	dB
$f_C + 38.8\text{MHz}$ to $2.5 \times f_C$	42 min.	42 min.	42 min.	42 min.	45 min.	dB
Input / Output Impedance	210//12.1	210//12.3	210//11.0	210//10.9	150 // 0	$\Omega // \text{pF}$
Package	QCC8C					

Item		ACTF0031	ACTF9059	Unit
Center Frequency	f_C	930.5	930.5	MHz
Usable Bandwidth	BW	± 2.0	± 2.0	MHz
Insertion Loss	IL	4.5 max	4.5 max	dB
	928.50 MHz 932.50 MHz			
Relative Attenuation (relative to IL)	α_{rel}			
$f_C - 100.0\text{MHz}$ $f_C - 38.8\text{ MHz}$		43 min.	40 min.	dB
$f_C + 20.0\text{MHz}$ $f_C + 38.8\text{ MHz}$		24 min.	23 min.	dB
$f_C + 38.8\text{MHz}$ $f_C + 60.0\text{ MHz}$		30 min.	28 min.	dB
$f_C + 60.0\text{MHz}$ $f_C + 100.0\text{ MHz}$		48 min.	40 min.	dB
Passband Ripple	$\Delta\alpha$	1.0 max.	1.0 max.	dB
	928.50 MHz 932.50 MHz			
Input / Output Impedance		50 Ω // 10nH	50 Ω // 10nH	
Package		QCC8C	DCC6	

In line with our ongoing policy of product evolution and improvement, the above specification may subject to change without notice

ISO9001:2000 Registered

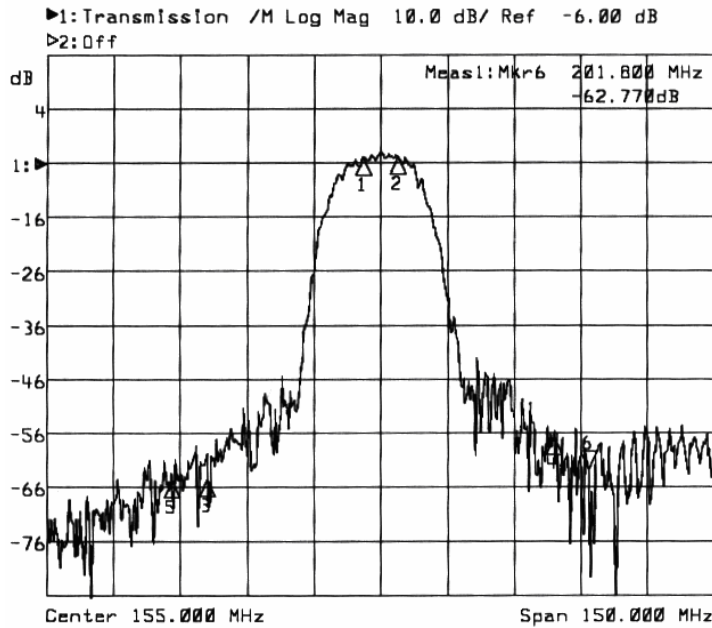
For quotations or further information please contact us at:

3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK

<http://www.actcrystals.com>

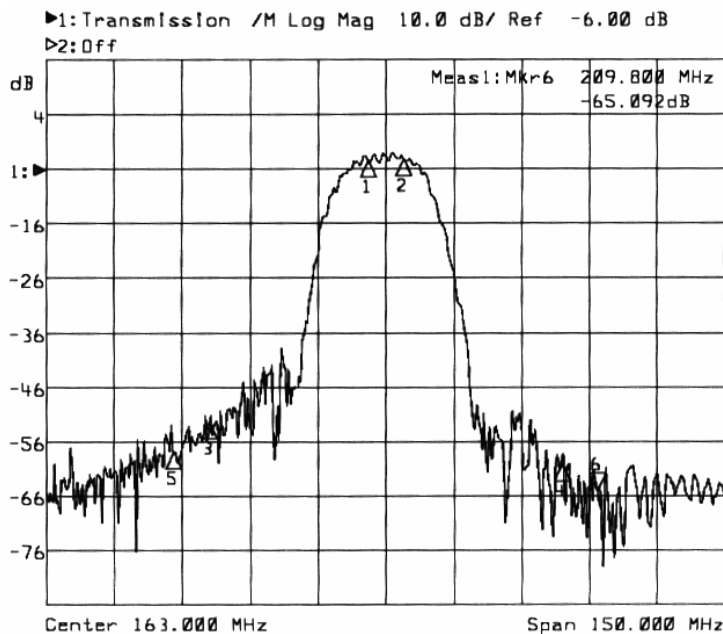
4. Typical Frequency Response

ACTF2005



1: Mkr (MHz)	dB	2: Mkr (MHz)	dB
1: 151.0000	-4.899		
2: 159.0000	-4.733		
3: 116.2000	-64.390		
4: 193.8000	-56.774		
5: 108.2000	-64.733		
6: 201.8000	-62.770		

ACTF2006



1: Mkr (MHz)	dB	2: Mkr (MHz)	dB
1: 159.0000	-4.334		
2: 167.0000	-4.087		
3: 124.2000	-52.128		
4: 201.8000	-60.095		
5: 116.2000	-57.672		
6: 209.8000	-65.092		

In line with our ongoing policy of product evolution and improvement, the above specification may subject to change without notice

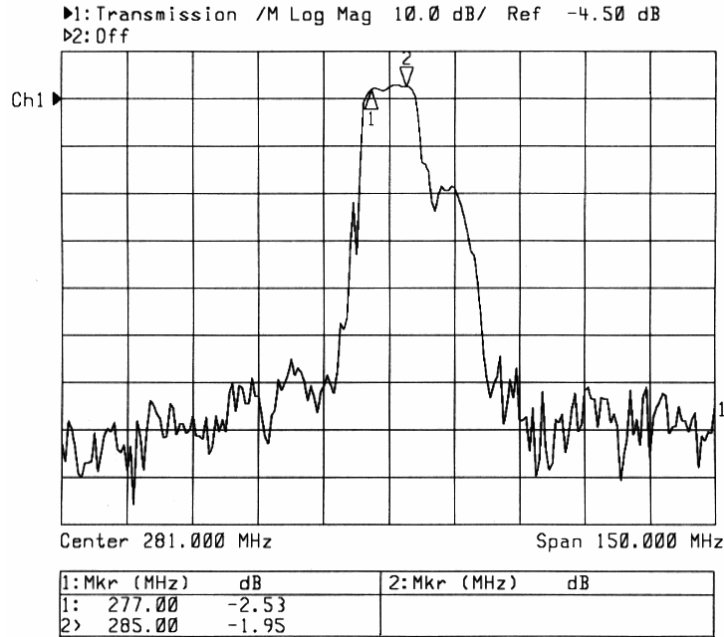
ISO9001:2000 Registered

For quotations or further information please contact us at:

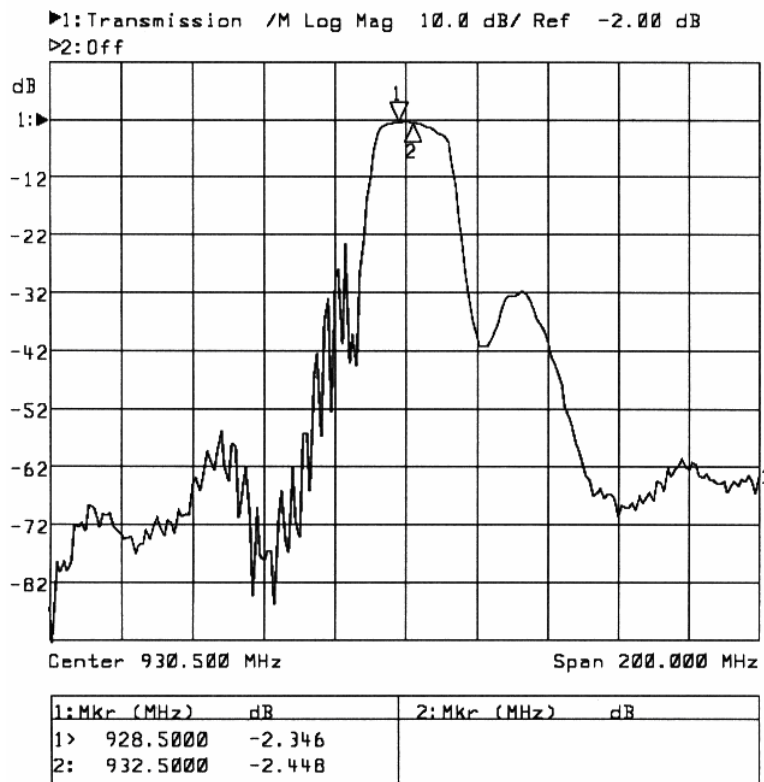
3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK

<http://www.actcrystals.com>

ACTF378



ACTF0031



In line with our ongoing policy of product evolution and improvement, the above specification may subject to change without notice

ISO9001:2000 Registered

For quotations or further information please contact us at:

3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK

<http://www.actcrystals.com>