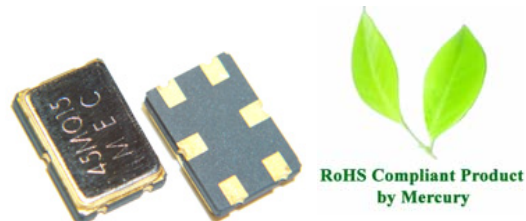


Surface Mount MCF (Monolithic Crystal Filter) 21.4 MHz 5x7x1.4 mm		MERCURY Since 1973
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- Thin and light weight; excellent shock and vibration resistance
- Suitable for automatic pick and place; Solder reflow capable
- Specifically designed for mobile, wireless communications, pagers, cellular and cordless phones.



SPECIFICATIONS

Model	21MQ15A
Package ③	“Q” package, 5x7x1.4 mm Ceramic SMD
Number of Poles ⑤	2 Poles
Center Frequency ①:	21.4 MHz
Pass Bandwidth④	± 7.5 kHz min. at 3 dB
Stop Bandwidth	±25 kHz max. at 18 dB
Guaranteed Attenuation	-910 KHz min. at 70 dB
Ripple	1.0 dB max.
Insertion Loss	2.0 dB max.
Spurious	15 dB min.
Terminating Impedance	1.5K Ω // 2.5 pF
Operating Temperature	-20°C to +70°C
Storage Temperature	-40°C to +85°C

HOW TO ORDER:

Part Number: Please specify 21MQ15A				
21	M	Q	15	A
①	②	③	④	⑤
①: Center Frequency Code “21” for 21.4 MHz ②: MCF Series ③: Package code “Q” for 5x7x1.4 mm ④: 3dB Bandwidth “15” for ± 7.5 kHz min. at 3 dB ⑤: “A” for 2 poles				

MERCURY www.mercury-crystal.com

Taiwan: TEL (886)-2-2406-2779, FAX (886)-2-2496-0769, e-mail: sales-tw@mercury-crystal.com

U.S.A.: TEL (1)-909-466-0427, FAX (1)-909-466-0762, e-mail: sales-us@mercury-crystal.com

MERCURY	Page 1 of 3	Date: July 1, 2006	Rev. 0
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Surface Mount MCF (Monolithic Crystal Filter)
21.4 MHz 5x7x1.4 mm Model "21MQ15A"

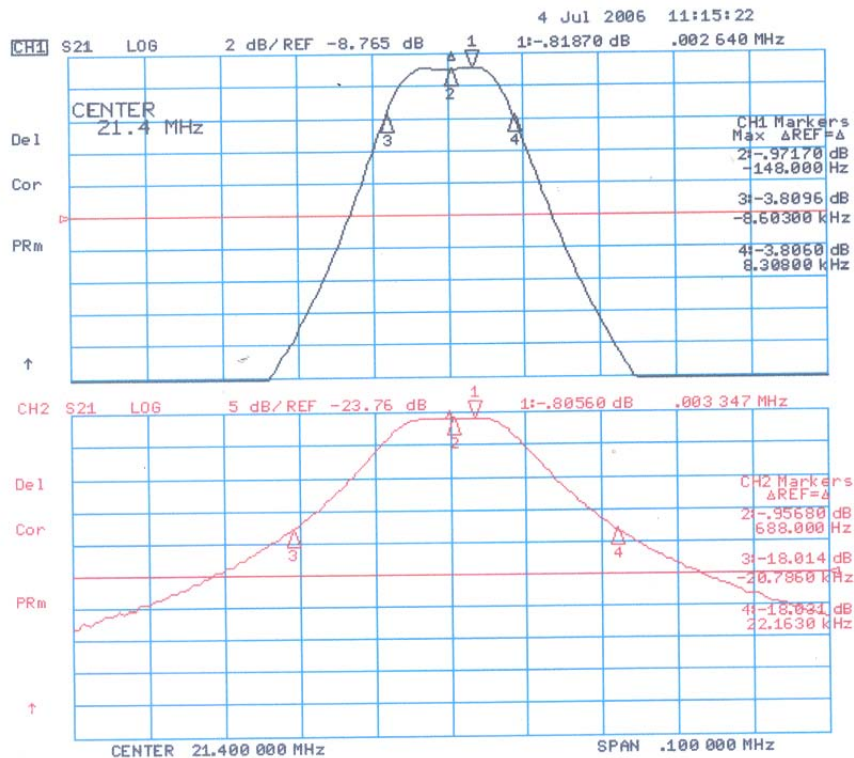


MERCURY
 Since 1973

ENVIRONMENTAL AND MECHANICAL SPECIFICATIONS

Green Requirement	RoHS compliant and Pb (lead free)
Gross Leak	60 sec min at +125°C in D.I. water or fluorocarbon fluid
Fine Leak	< 2 x10 ⁻⁸ atm cc /sec by helium leak check
Shock	Half sine wave acceleration of 100G peak amplitude for 11 m. sec. duration, 3 cycles each plane.
Vibration	±5 ppm max. Frequency:10 to 55 Hz, amplitude: 1.5 mm or 10 Gs rms. Duration: 6 hours.
Drop Test	Free drop onto hard wood board at 75 cm, 3 radon drops.
Solderability	MIL-STD-883, Method 2003
Humidity	After 48 hours at 85°C, 85% relative humidity non-condensing
Thermal Shock	Temperature cycling: Exposed at -40°C for 30 minutes then to +85°C for 30 minutes for duration of 5 days
Marking Permanency	MIL-STD-202, Method 215. Laser engraved.

Typical Frequency Response

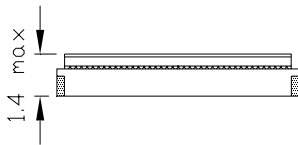
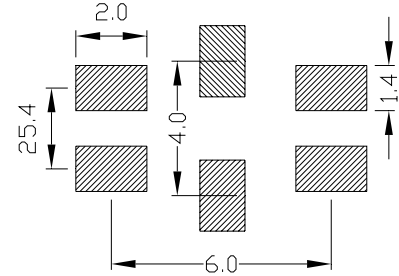
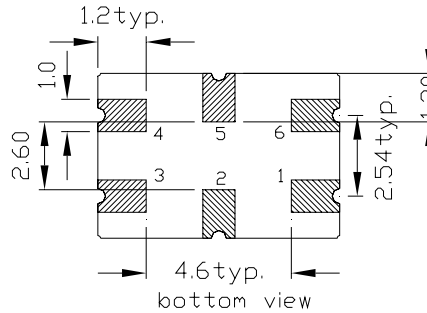
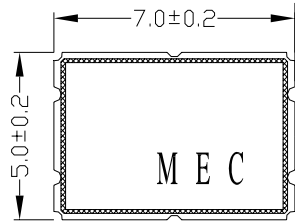


Surface Mount MCF (Monolithic Crystal Filter)
21.4 MHz 5x7x1.4 mm Model "21MQ15A"



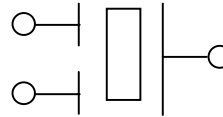
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 Since 1973

PACKAGE DIMENSIONS AND SUGGESTED PAD LAYOUT Unit: mm



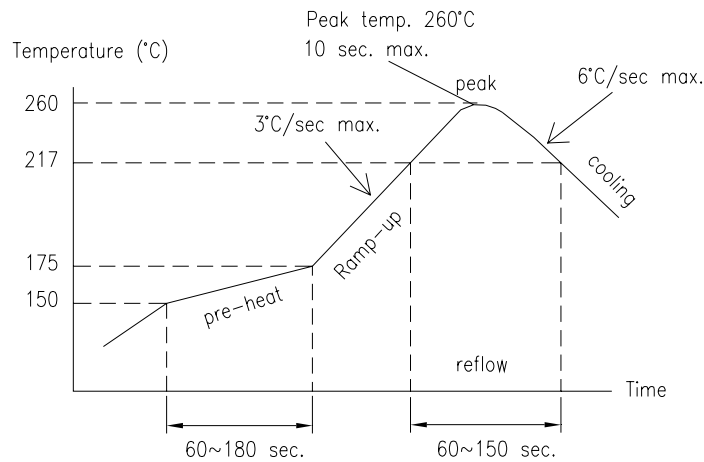
Pad # 3 MCF Input

Pad # 6 MCF Output



Ground
 Pad #1,2,4,5
 and metal lid

RECOMMENDED REFLOW SOLDERING PROFILE:



TAPE AND REEL SPEC.: 16 mm tape compliant to EIA-481-A; 1000 pcs per reel.

