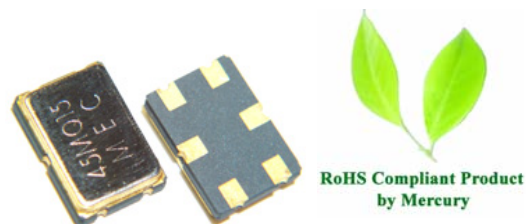


Surface Mount MCF (Monolithic Crystal Filter) 21.7 MHz 5x7x1.4 mm	Model "217MQ15A"		MERCURY Since 1973
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- Thin and light weight; excellent shock and vibration resistance
- Suitable for automatic pick and place; Solder reflow capable
- Specifically designed for mobile, wireless communications, pagers, cellular and cordless phones.



SPECIFICATIONS

Model	217MQ15A
Package ③	"Q" package, 5x7x1.4 mm Ceramic SMD
Number of Poles ⑤	2 Poles
Center Frequency ①:	21.7 MHz
Pass Bandwidth ④	± 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	1500 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 217MQ15A				
217	M	Q	15	A
①	②	③	④	⑤
①: Center Frequency Code "217" for 21.7 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: Aug 15, 2006	Rev. 1
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Surface Mount MCF (Monolithic Crystal Filter)
21.7 MHz 5x7x1.4 mm Model "217MQ15A"

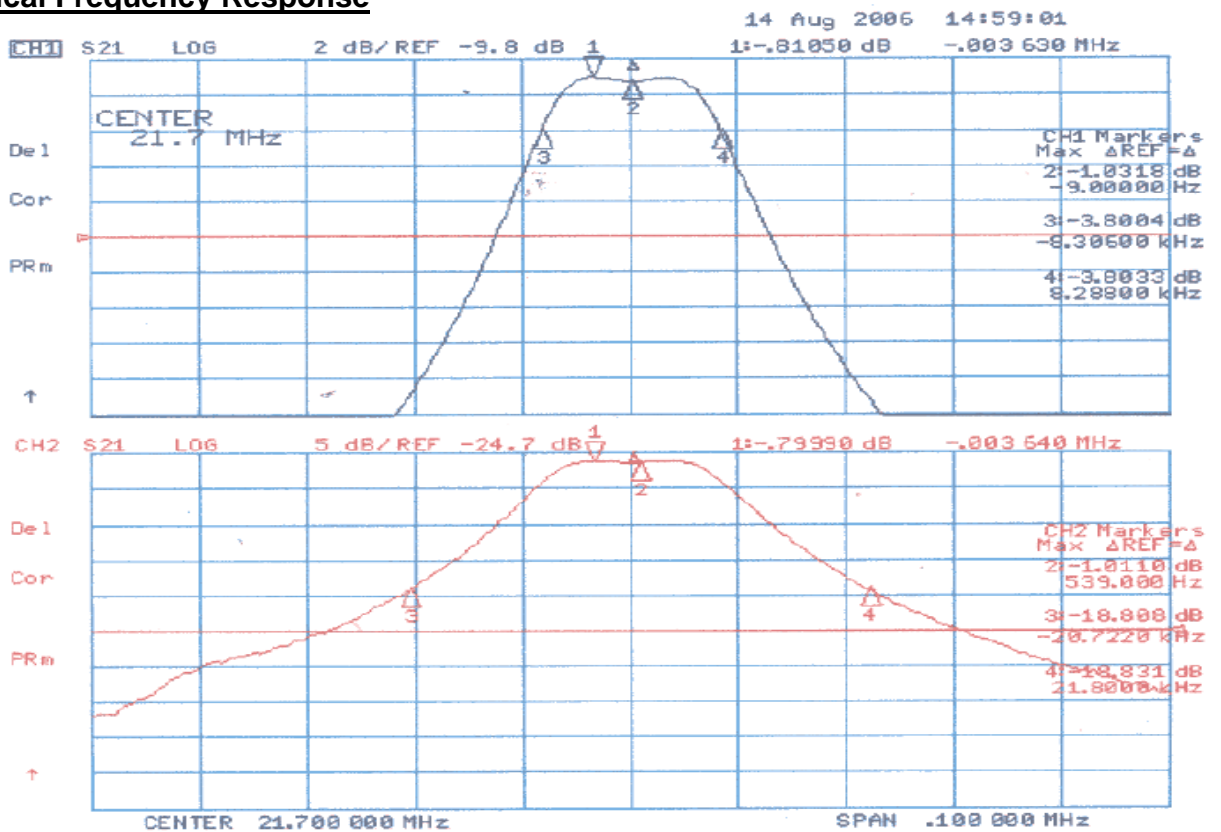


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ENVIRONMENTAL AND MECHANICAL SPECIFICATIONS

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



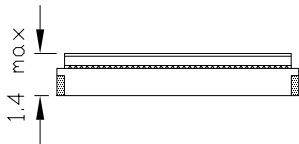
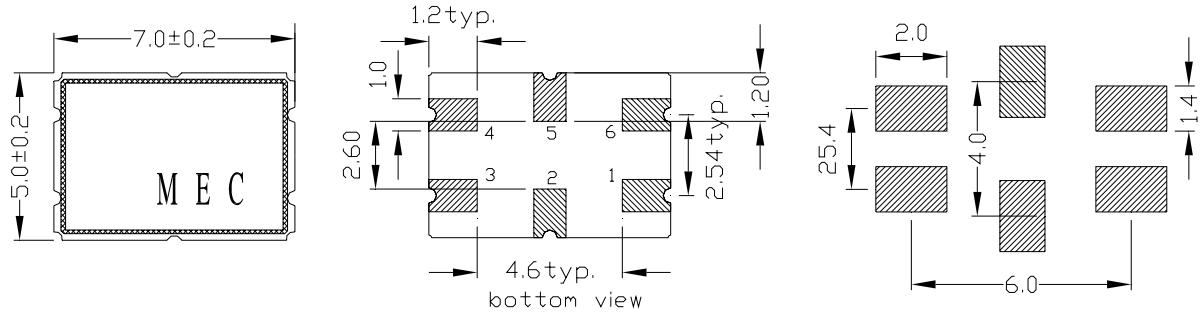
Surface Mount MCF (Monolithic Crystal Filter)
21.7 MHz 5x7x1.4 mm Model "217MQ15A"



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 Since 1973

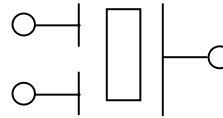
PACKAGE DIMENSIONS AND SUGGESTED PAD LAYOUT

Unit: mm



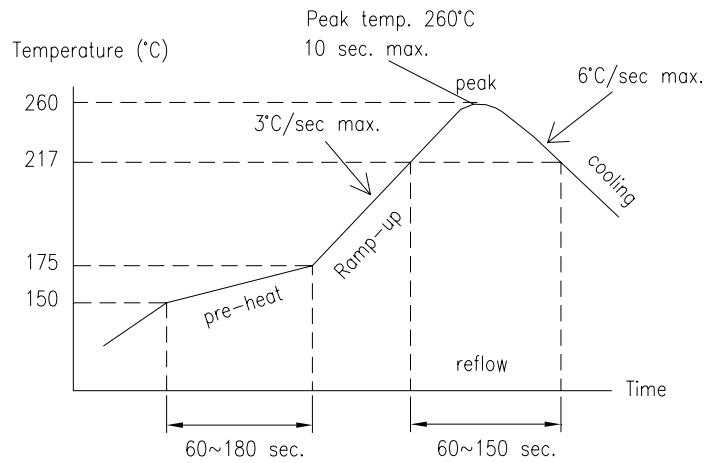
Pad # 3 MCF Input

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.

