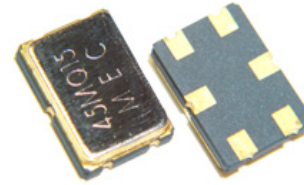


Monolithic Crystal Filters – Surface Mount
4 pole in single 5x7 mm package Model “21MQ7.5B”



MERCURY
 Since 1973

- 4 pole in single package. Save board space.
- 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	21MQ7.5B
Package ⑤	“Q” package, 5x7x1.35 mm Ceramic SMD
Number of Poles ⑤	4 Poles in single package
Center Frequency ①:	21.4 MHz
Pass Bandwidth④	±3.75 kHz min. at 3 dB
Stop Bandwidth	±15 KHz max. at 40 dB
Guaranteed Attenuation	50 dB min. from (fo-200 KHz) to (fo-1000 KHz)
Ripple	1.0 dB max.
Insertion Loss	3.0 dB max.
Terminating Impedance	1050 Ω // 1.5 pF (Cc= 14 pF)
Operating Temperature	-20°C to +70°C
Aging	± 2 ppm / year max.
Storage Temperature	-40°C to +85°C
Packaging	180 mm reel; 16 mm tape; 8 mm pitch; 1000 pcs per reel.

HOW TO ORDER:

Part Number: Please specify 21MQ7.5B				
21	M	Q	7.5	B
①	②	③	④	⑤
①: Center Frequency Code “21.4” for 21.4 MHz		②: MCF Series		
③: Package code “Q” for 5x7x1.35 mm		④: 3dB bandwidth: “7.5” for ± 3.75 kHz (total 7.5 KHz).		
⑤: “B” for 4 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

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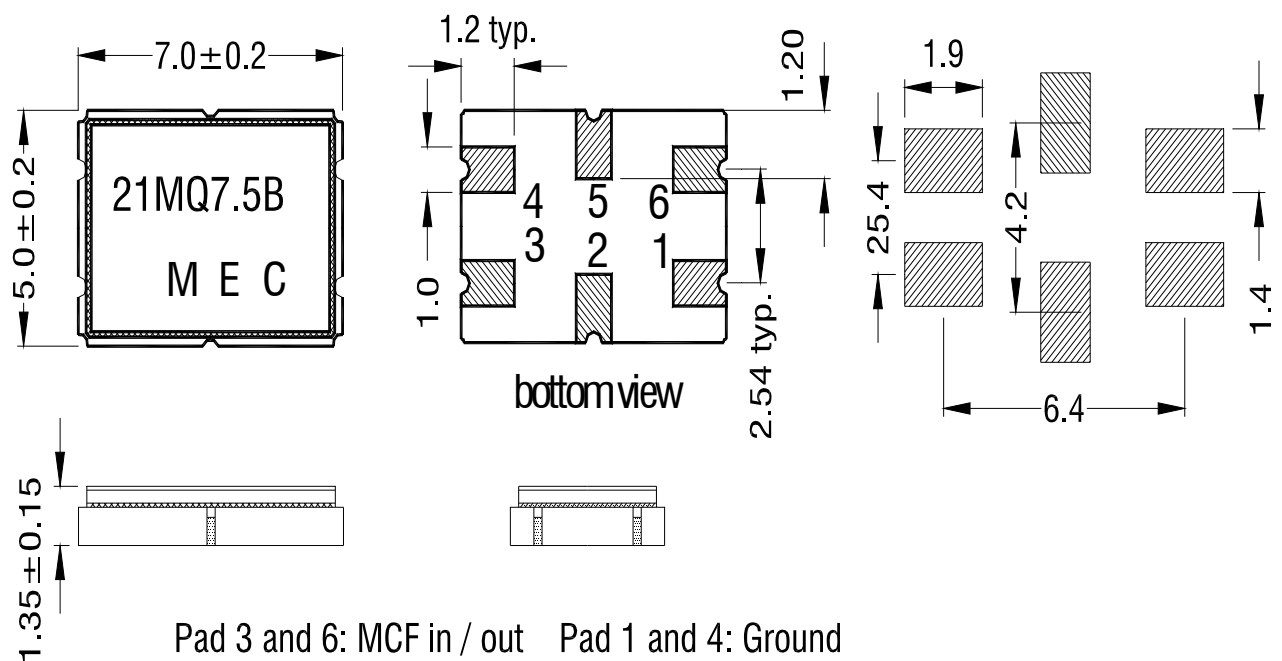


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 Since 1973

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.
Pad Plating	Gold over nickel

PACKAGE DIMENSIONS AND SUGGESTED PAD LAYOUT Unit: mm



Pad 3 and 6: MCF in / out Pad 1 and 4: Ground
 Pad 2 and 5: Coupling capacitor