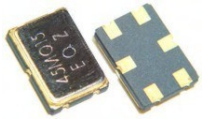
EUROQUARTZ

MONOLITHIC CRYSTAL FILTERS

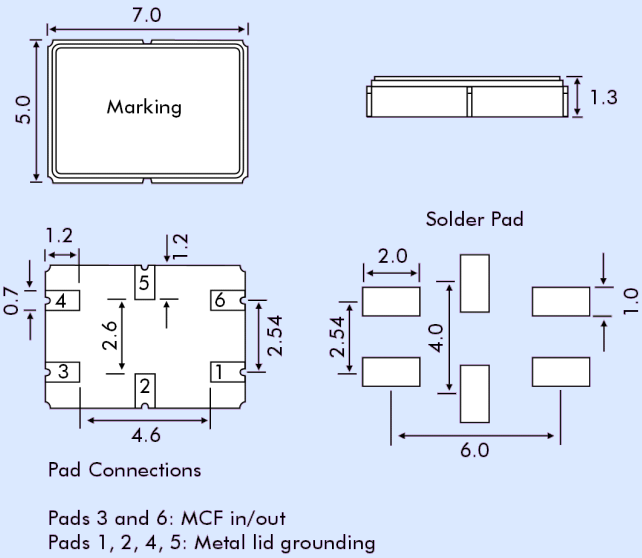
SMD TYPE 'Q' Series 2 & 4 poles — 21.4, 21.7, and 45.0MHz

- **Compact and light weight**
- **Excellent shock and vibration resistance**
- **Suitable for auto pick and place, solder reflow capable**
- **Designed for mobile, wireless comms, pagers, cellular etc.**



RoHS

OUTLINE & DIMENSIONS



ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

RoHS Status:	RoHS compliant and pB free
Gross Leak:	60s minimum at +125°C in D.I. water or flurocarbon fluid.
Shock:	Half sine wave, acceleration of 100g peak amplitude for 11ms duration, 3 cycles in each plane.
Vibration:	±5ppm maximum, frequency 10Hz to 55Hz, amplitude 1.5mm or 10gs r.m.s. Duration 6 hours
Drop Test:	Three drops onto hard wood board from 75cm. 3 random drops.
Humidity:	After 48 hours at 85°C, 85% relative humidity, non-condensing
Thermal Shock:	Temperature cycling, exposed to -40° for 30 minutes then at +85°C for 30 minutes, duration of 5 days
Operating Temperature Range:	-20° to +70°C
Storage Temperature Range:	-40° to +85°C

SPECIFICATIONS

Frequency (MHz)	Model	No. of Poles	Pass Bandwidth dB	Pass Bandwidth kHz	Stop Bandwidth dB	Stop Bandwidth kHz	Ripple dB max.	Insertion Loss dB max.	Guaranteed Attenuation dB	Guaranteed Attenuation kHz	Terminating Impedance Ohms//pF	Terminating Impedance Cc(pF)
21.400	21MQ7.5A	2	3	±3.75	20	±18	1.0	2.0	70	-910	850 // 6.0	
21.400	21MQ15A	2	3	±7.5	18	±25	0.5	1.5	70	-910	1500 // 2.5	
21.400	21MQ15B	4	3	±7.5	40	±25	1.0	3.0	70	-910	1800 // 0.35	5.0
21.400	21MQ30A	2	3	±15	15	±50	1.5	2.0	50	-910	2500 // 0	
21.700	21.7MQ15A	2	3	±7.5	18	±28	1.0	2.0	70	-910	1500 // 2.5	
21.700	21.7MQ15B	4	3	±7.5	40	±25	1.0	3.0	70	-910	1750 // 0.35	5.0
27.000	21.7MQ30A	2	3	±15	15	±50	1.5	2.0	50	-910	2500 // 0	
45.000	45MQ15A	2	3	±7.5	15	±25	1.0	2.0	70	-910	560 // 6.0	
45.000	45MQ15B	4	3	±7.5	30	±25	1.0	3.0	80	-910	600 // 2.3	7.5
45.000	45MQ30A	2	3	±15	15	±60	1.0	2.0	70	-910	1200 // 1.8	
45.000	45MQ30B	4	3	±15	30	±40	1.0	3.0	70	-910	1200 // 1.0	2.5

PART NUMBER FORMAT

Example: 21MQ7.5A

Centre Frequency Code
- 21M = 21.4MHz
- 21.7M = 21.700MHz
- 45M = 45.000MHz

Q: Package style 7.0 x 5.0 x 1.3mm SMD

Pass Bandwidth (at 3dB min.)
- 7.5 = ±3.75kHz
- 15 = ±7.5kHz
- 30 = ±15kHz

Poles code
- A = 2 poles (1 piece)
- B = 4 poles (2 pieces)
- C = 6 poles (3 pieces)
- D = 8 poles (4 pieces)

EUROQUARTZ LIMITED Blacknell Lane CREWKERNE Somerset UK TA18 7HE
Tel: +44 (0)1460 230000 Fax: +44 (0)1460 230001 info@euroquartz.co.uk www.euroquartz.co.uk