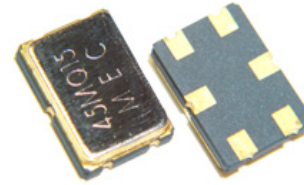


**Monolithic Crystal Filters – Surface Mount**  
**4 pole in single 5x7 mm package Model “45MQ15B”**



**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**

<b>Model</b>	<b>45MQ15B</b>
<b>Package ⑤</b>	“Q” package, 5x7x1.35 mm Ceramic SMD
<b>Number of Poles ⑤</b>	4 Poles in single package
<b>Center Frequency ①:</b>	45 MHz
<b>Pass Bandwidth④</b>	±7.5 kHz min. at 3 dB
<b>Stop Bandwidth</b>	±22 KHz max. at 25 dB
<b>Guaranteed Attenuation</b>	80 dB min. at (fo-900) KHz
<b>Ripple</b>	1.0 dB max.
<b>Insertion Loss</b>	3.0 dB max.
<b>Terminating Impedance</b>	800 Ω // 1.7 pF (Cc= 8.0 pF)
<b>Operating Temperature</b>	-20°C to +70°C
<b>Aging</b>	± 2 ppm / year max.
<b>Storage Temperature</b>	-40°C to +85°C
<b>Packaging</b>	180 mm reel; 16 mm tape; 8 mm pitch; 1000 pcs per reel.

**HOW TO ORDER:**

<b>Part Number:</b> Please specify <b>45MQ15B</b>				
45	M	Q	15	B
①	②	③	④	⑤
①: Center Frequency Code “45” for 45 MHz      ②: MCF Series ③: Package code “Q” for 5x7x1.35 mm      ④: 3dB bandwidth: “15” for ± 7.5 kHz (total 15 KHz). ⑤: “B” for 4 poles				

**MERCURY** [www.mercury-crystal.com](http://www.mercury-crystal.com)

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

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**ENVIRONMENTAL AND MECHANICAL SPECIFICATIONS**

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

**PACKAGE DIMENSIONS AND SUGGESTED PAD LAYOUT**

Unit: mm

