

4 Pole MCF (Built-in coupling capacitor) (Surface-mount Type)

■ Features

This four-pole crystal filter with a built-in coupling capacitor also supports surface mounting.

- Supports surface mounting. (Packed with embossed tape)
- Built-in coupling capacitor.
- Excellent shock-resistance.
- Frequency range Fundamental: 20 to 90 MHz



Pb Free

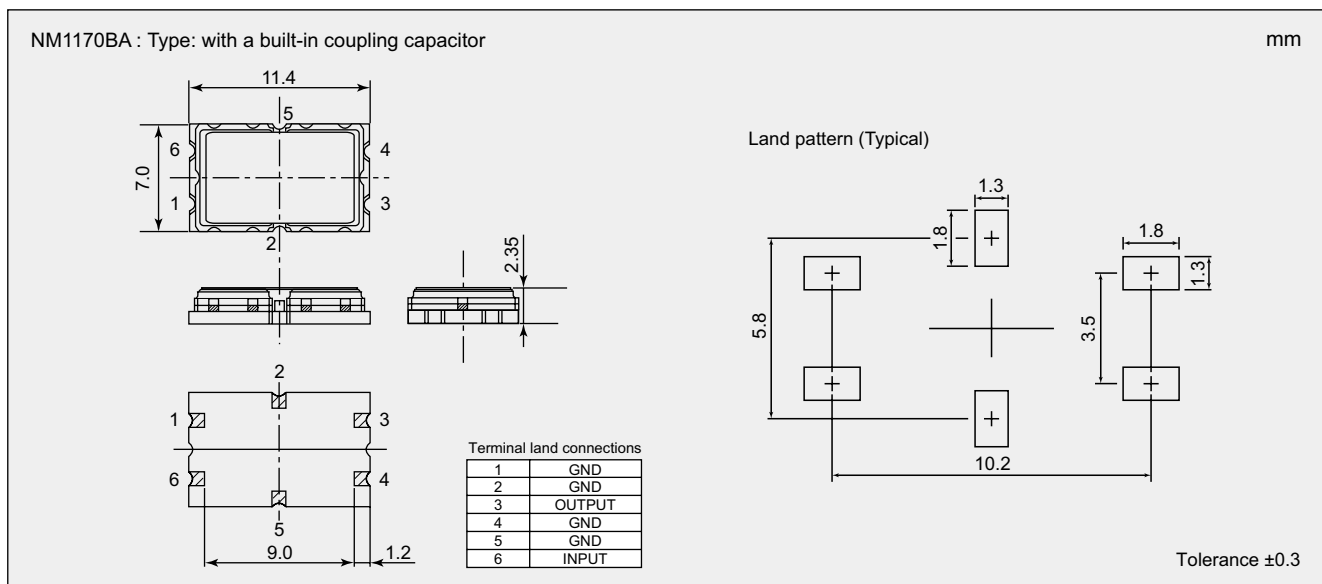
RoHS Compliant
Directive 2011/65/EU

■ Specifications

Model	21SC15BB	45SC7.5BG	45SC15BE	45SC20BB	45SC30BD	70SC20BA	90SC15B
Number of Poles	4						
Nominal Frequency	21.4MHz	45 MHz				70.05 MHz	90 MHz
3 dB Passband Width	Min. ± 7.5 kHz	Min. ± 3.75 kHz	Min. ± 7.5 kHz	Min. ± 10 kHz	Min. ± 15 kHz	Min. ± 10 kHz	Min. ± 7.5 kHz
Stop Bandwidth	Max. ± 25 kHz at 40 dB	Max. ± 12.5 kHz at 25 dB	Max. ± 25 kHz at 35 dB	Max. ± 25 kHz at 25 dB	Max. ± 60 kHz at 20 dB	Max. ± 25 kHz at 20 dB	Max. ± 25 kHz at 25 dB
Ripple	Max. 1.5 dB	Max. 1 dB	Max. 2 dB	Max. 1 dB	Max. 1 dB	Max. 1 dB	Max. 1 dB
Insertion Attenuation (insertion Loss)	Max. 3 dB	Max. 5 dB	Max. 5 dB	Max. 3 dB	Max. 4 dB	Max. 4.5 dB	Max. 8 dB
Guaranteed Attenuation	Min. 80 dB at -910 kHz	Min. 80 dB at -910 kHz	Min. 80 dB at -910 kHz	Min. 80 dB at -910 kHz	Min. 70 dB at -910 kHz	Min. 70 dB at -910 kHz	Min. 75 dB at -910 kHz
Spurious Characteristics	Min. 40 dB Within ± 1 MHz	Min. 50 dB Within ± 1 MHz	Min. 50 dB Within ± 1 MHz	Min. 25 dB Within ± 1 MHz	Min. 30 dB Within ± 1 MHz	Min. 35 dB Within ± 1 MHz	Min. 40 dB Within ± 1 MHz
Terminating Impedance	1500 Ω // 1.5 pF	350 Ω // 6 pF	650 Ω // 2 pF	800 Ω // 1.5 pF	1000 Ω // 1 pF	300 Ω // 2 pF	310 Ω // 2 pF
Operating Temperature Range	-20 to $+70$ °C	-20 to $+70$ °C	-20 to $+70$ °C	-30 to $+70$ °C	-20 to $+70$ °C	-20 to $+70$ °C	-20 to $+70$ °C
Package Type	NM1170BA						
Specification Number	MN15-395	MN15-368	MN15-319	MN15-372	MN15-371	MN15-317	MN15-320

Caution: Solder only the top surface of the filter before using it.

■ Dimensions



Please specify the model name, frequency, and specification number when you order products.
For further questions regarding specifications, please feel free to contact us.