

4 Pole MCF

(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: 30 to 90 MHz



Pb
Free

RoHS Compliant
Directive 2011/65/EU

■ Specifications

Model	45SC7.5BG	45SC15BE	45SC20BB	45SC30BD	70SC20BA	90SC15B
Number of poles	4					
Nominal frequency	45 MHz				70.05 MHz	90 MHz
3 dB Passband width	Min. ± 3.75 kHz	Min. ± 7.5 kHz	Min. ± 10 kHz	Min. ± 15 kHz	Min. ± 10 kHz	Min. ± 7.5 kHz
Stop bandwidth	Max. ± 12.5 kHz at 25 dB	Max. ± 25 kHz at 35 dB	Max. ± 25 kHz at 25 dB	Max. ± 60 kHz at 40 dB	Max. ± 25 kHz at 20 dB	Max. ± 25 kHz at 25 dB
Ripple	Max. 1 dB	Max. 2 dB	Max. 1 dB	Max. 1 dB	Max. 1 dB	Max. 1 dB
Insertion loss (insertion attenuation)	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. 70 dB at -910 kHz	Min. 70 dB at -910 kHz	Min. 75 dB at -910 kHz
Spurious characteristics	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	$350 \Omega // 6$ pF	$650 \Omega // 2$ pF	$800 \Omega // 1.5$ pF	$1000 \Omega // 1$ pF	$300 \Omega // 2$ pF	$310 \Omega // 2$ pF
Operating temperature range	-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					
Ordering code	45SC7.5BG-45M-MN15-368	45SC15BE-45M-MN15-319	45SC20BB-45M-MN15-372	45SC30BD-45M-MN15-371	70SC20BA-70.05M-MN15-317	90SC15B-90M-MN15-320

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

■ Dimensions

