

## 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 100 MHz



Pb Free

RoHS Compliant  
Directive 2002/95/EC

### ■ Specifications

Model	45SC7.5BG	45SC15BE	45SC20BB	45SC30BD	70SC20BA	90SC15B
Number of poles	4	4	4	4	4	4
Nominal frequency	45MHz	45MHz	45MHz	45MHz	70.05MHz	90MHz
3dB Passband width	±3.75kHz min.	±7.5kHz min.	±10kHz min.	±15kHz min.	±10kHz min.	±7.5kHz min.
Stop bandwidth	±12.5 kHz max. at 25 dB	±25 kHz max. at 35 dB	±25 kHz max. at 25 dB	±60 kHz max. at 40 dB	±25 kHz max. at 20 dB	±25 kHz max. at 25 dB
Ripple	1dB max.	2dB max.	1dB max.	1dB max.	1dB max.	1dB max.
Insertion loss (insertion attenuation)	5dB max.	5dB max.	3dB max.	4dB max.	4.5dB max.	8dB max.
Guaranteed attenuation	80 dB min. at -910 kHz	80 dB min. at -910 kHz	80 dB min. at -910 kHz	70 dB min. at -910 kHz	70 dB min. at -910 kHz	75 dB min. at -910 kHz
Spurious characteristics	50dB min.	50dB min.	25dB min.	30dB min.	35dB min.	40dB min.
Terminating impedance	350Ω//6pF	650Ω//2pF	800Ω//1.5pF	1000Ω//1pF	300Ω//2pF	310Ω//2pF
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	NM1170BA	NM1170BA	NM1170BA	NM1170BA	NM1170BA
Code for placing an order	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

