

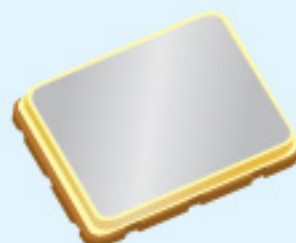
# CRYSTAL FILTER

## SMD MCF Series



HUAFENG  
CRYSTAL

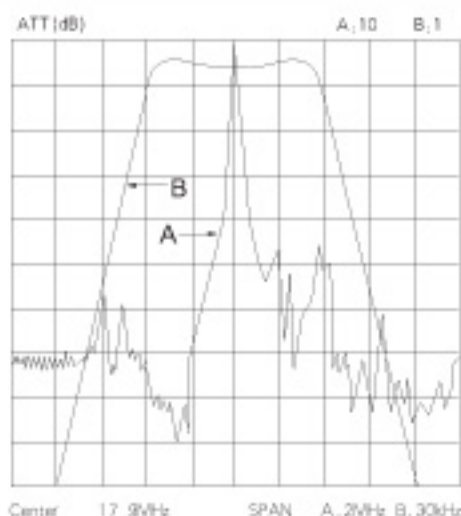
- Ceramic SMD MCF
- Compactness & lightness (Height:1.4mm)
- Excellent vibration resistance and shock resistance
- Designed for automatic mounting and reflow soldering



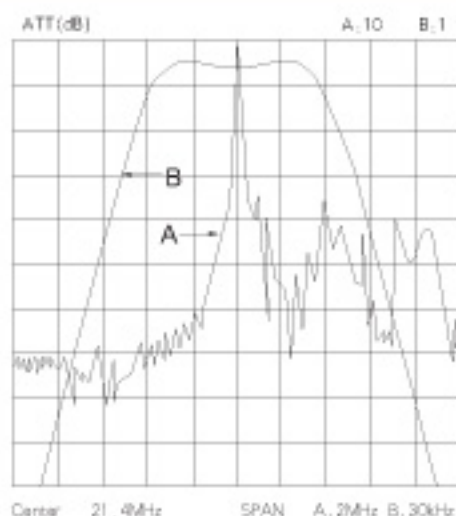
### ■ ELECTRICAL SPECIFICATIONS

Model	Nominal Frequency (MHz)	Pass Bandwidth (dB) (kHz)	Stop Bandwidth (dB) (kHz)	Ripple (dB)	Insertion Loss (dB)	Guaranteed Attenuation (dB)	Terminating Impedance (k $\Omega$ //pF)	Package
S17M15A	17.900	3 $\pm$ 7.5	17 $\pm$ 25	0.75	2.0	65	1.75//1.7	S-1
S21M7.5A	21.400	3 $\pm$ 3.75	18 $\pm$ 15	1.0	2.0	65	0.87//6.0	S-1
S21M15A	21.400	3 $\pm$ 7.5	18 $\pm$ 25	0.5	1.5	65	1.5//2.5	S-1
S21.7M7.5A	21.700	3 $\pm$ 3.75	18 $\pm$ 15	1.0	2.0	65	0.87//6.0	S-1
S21.7M15A	21.700	3 $\pm$ 7.5	18 $\pm$ 25	0.5	1.5	65	1.5//2.5	S-1
S45M15A	45.000	3 $\pm$ 7.5	15 $\pm$ 25	1.0	2.0	60	0.56//6.0	S-1
S45M30A	45.000	3 $\pm$ 15	15 $\pm$ 50	1.0	3.0	65	1.2//1.5	S-1

### ■ CHARACTERISTIC DIAGRAM

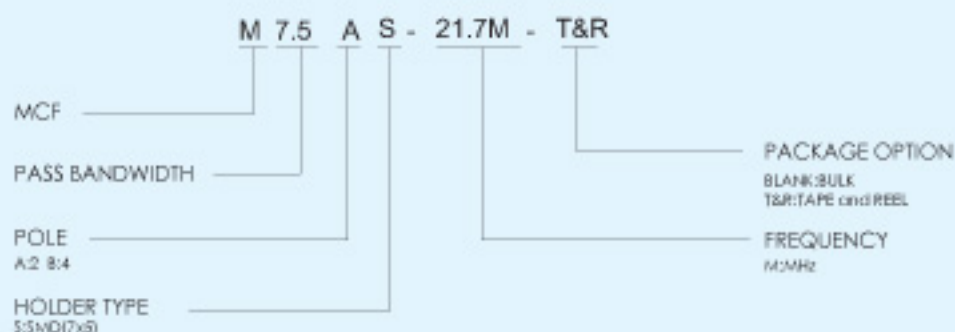


S17M15A

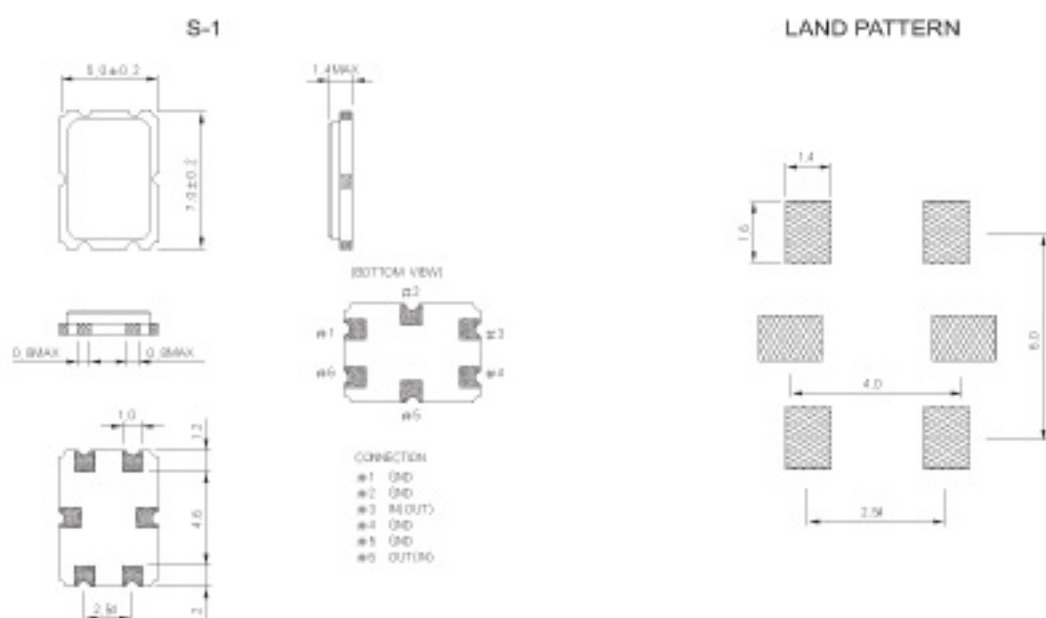


S21M15A

## ■ PART NUMBERING GUIDE



## ■ MECHANICAL DIMENSIONS



## ■ ENVIRONMENTAL / MECHANICAL SPECIFICATIONS

PARAMETER	SPECIFICATIONS
Seal Integrity	Bubble test in Perfluorocarbon at +1 25°C ± 5°C for 60 seconds minimum.
Thermal shock	Thermal shock between -40~+85°C for 20 hours(10 cycle).
Shock	Random drop on hard wooden plate 3 times from a height of 50cm.
Vibration	Frequency with an amplitude of 1.5mm sweeping between 10Hz to 55Hz within 1 minute(approximately)for 2 hours minimum on each axis [X,Y and Z]for a total of 6 hours.