

CRYSTAL FILTERS

70 – 90 SERIES MCF (BUILT-IN TRANSFORMER TYPE)

This type is of compact size with a maximum height of only 7.5mm as compared to conventional crystal filters for car telephones. Being a built-in transformer type, it is also possible to match the input/output circuits with various impedance values.

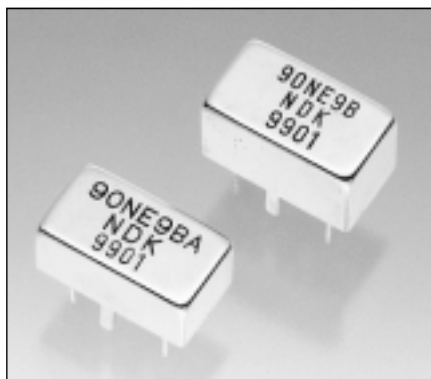
■ Features

- Compactness and light weight
- Stable temperature characteristics
- Can be manufactured with your desired terminal impedance
- No adjustments required when using since it is completely preadjusted.

■ Attention on use

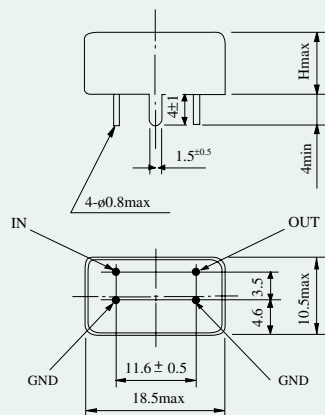
- Cannot be washed because of non-sealed construction.

Nominal Frequency	70MHz~90MHz	90MHz
Channel Spacing	60kHz	12.5kHz
3dB Pass Bandwidth	±15kHz min	±4.5kHz min
25dB Attenuation Bandwidth	±60kHz max	±12.5kHz max (13dB Attenuation Bandwidth)
Ripple	1.5dB max	1.5dB max
Insertion Loss	6dB max	
Guaranteed Attenuation	at ± (60~150) kHz 15dB min at - (60~150) kHz 30dB min at -910kHz 70dB min	at ± (100~500) kHz 30dB min at ± (500~1000) kHz 70dB min
Spurious	10dB min	30dB min
Group Delay Variation	$F_0 \pm 10\text{kHz}$ 15μs max	$F_0 \pm 4\text{kHz}$ 8μs max
Terminating Impedance	Designed impedance within about 50Ω~1kΩ	
Operating Temp. Range	-20~+70°C	
Type	D-168, D-214	

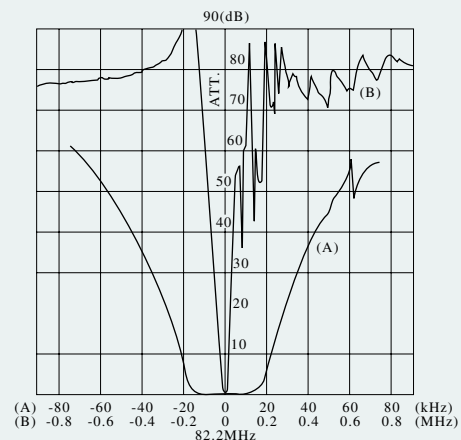
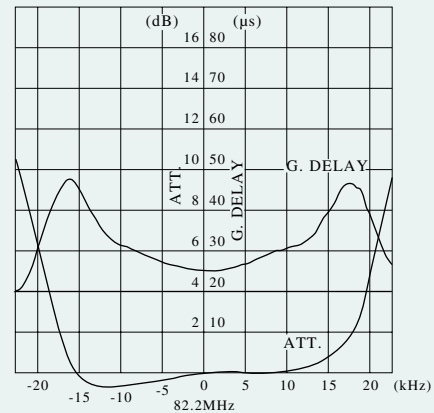


D-168, 214

(mm)



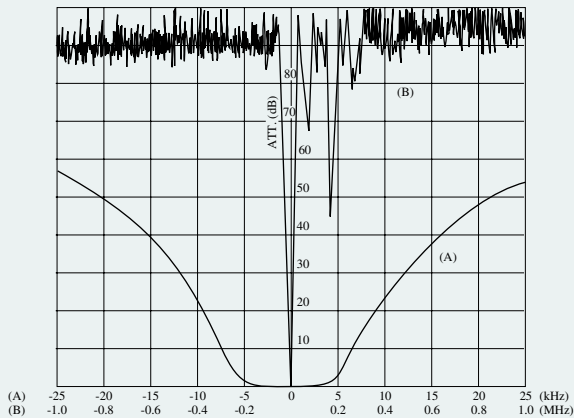
D-168	H=10.5mm
D-214	H=7.5mm



45 – 100MHz SERIES MCF (BUILT-IN TRANSFORMER TYPE)

Nominal Frequency	45~100MHz	
Channel Spacing	12.5kHz	25kHz
3dB Pass Bandwidth	$\pm 3.75\text{kHz}$	$\pm 7.5\text{kHz}$
Attenuation Bandwidth	at 25dB $\pm 12.5\text{kHz}$ max	at 30dB $\pm 25\text{kHz}$ max
Ripple	2dB max	
Insertion Loss	6dB max	
Guaranteed Attenuation	40dB min $\pm (20\sim 350)\text{ kHz}$	Nominal frequency of lower than 60 MHz: 35dB min at $\pm (100\sim 350)\text{ kHz}$
		Nominal frequency of higher than 60 MHz : 35dB min at $\pm (30\sim 350)\text{ kHz}$
	70dB min at $\pm 910\text{kHz}$	
Operating Temp Range	$-20\sim +70^{\circ}\text{C}$	
Terminating Impedance	Designed impedance width $50\Omega\sim 1\text{k}\Omega$	
Type	D-168, D-214	

Channel Spacing 12.5kHz



Channel Spacing 25kHz

