

## 10.7 MHz-Series MCF

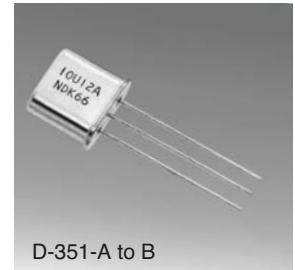
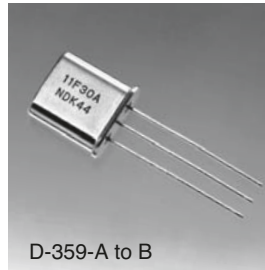
### ■ Features

Differs from conventional crystal filters, this filter needs no transformer, resulting in a light and compact product, with excellent characteristics yet still maintains the high Q of crystal.

- Compact and light.
- Stable temperature characteristics.
- Structure highly resistant to vibration and shock.

Pb Free

RoHS Compliant  
Directive 2002/95/EC



### ■ Specifications

Model	10F7.5A	10U7.5A	10T7.5BH	10F12A	10U12AA	10F12B
Number of poles	2		4	2		4
Nominal frequency	10.7MHz					
3 dB Passband width	Min. $\pm 3.75$ kHz			Min. $\pm 6$ kHz		
Stop bandwidth	Max. $\pm 15$ kHz at 18 dB	Max. $\pm 18$ kHz at 18 dB	Max. $\pm 12.5$ kHz at 40 dB	Max. $\pm 22$ kHz at 18 dB	Max. $\pm 22$ kHz at 18 dB	Max. $\pm 20$ kHz at 40 dB
Ripple	Max. 0.7 dB	Max. 1 dB	Max. 1 dB	Max. 0.5 dB	Max. 1 dB	Max. 1 dB
Insertion loss (insertion attenuation)	Max. 2 dB	Max. 2 dB	Max. 2.5 dB	Max. 2 dB	Max. 2 dB	Max. 2.5 dB
Guaranteed attenuation	Min. 30 dB Within $\pm 1$ MHz	Min. 30 dB Within $\pm 1$ MHz	Min. 60 dB Within $\pm 1$ MHz	Min. 30 dB Within $\pm 1$ MHz	Min. 30 dB Within $\pm 1$ MHz	Min. 60 dB Within $\pm 1$ MHz
Spurious characteristics	Min. 18 dB Within $\pm 1$ MHz	Min. 18 dB Within $\pm 1$ MHz	Min. 40 dB Within $\pm 1$ MHz	Min. 18 dB Within $\pm 1$ MHz	Min. 18 dB Within $\pm 1$ MHz	Min. 40 dB Within $\pm 1$ MHz
Terminating impedance	1.5 k $\Omega$ // 5 pF	1.8 k $\Omega$ // 4 pF	1.5 k $\Omega$ // 4.5 pF Cc = 17 pF	2.3 k $\Omega$ // 3 pF	2.3 k $\Omega$ // 3 pF	3 k $\Omega$ // 1.5 pF Cc = 8.5 pF
Operating temperature range	-20 to +70 °C		-20 to +70 °C	-20 to +70 °C		-20 to +70 °C
Package type	D-359-A	D-351-A	D-359-B	D-359-A	D-351-A	D-359-B
Ordering code	10F7.5A-10.7M-MN15-037	10U7.5A-10.7M-MN15-293	10T7.5BH-10.7M-MN15-254	10F12A-10.7M-MN15-066	10U12AA-10.7M-MN15-295	10F12B-10.7M-MN15-257

Model	10T15AN	10U15A	10T15BK	10T20AL	10T20BA	10F30A	10U30AA	10F30B
Number of poles	2		4	2	4	2		4
Nominal frequency	10.7MHz							
3 dB Passband width	Min. $\pm 7.5$ kHz			Min. $\pm 10$ kHz		Min. $\pm 15$ kHz		
Stop bandwidth	Max. $\pm 25$ kHz at 18 dB	Max. $\pm 25$ kHz at 18 dB	Max. $\pm 25$ kHz at 40 dB	Max. $\pm 34$ kHz at 18 dB	Max. $\pm 34$ kHz at 40 dB	Max. $\pm 50$ kHz at 18 dB	Max. $\pm 50$ kHz at 18 dB	Max. $\pm 50$ kHz at 40 dB
Ripple	Max. 0.5 dB	Max. 1 dB	Max. 1 dB	Max. 0.5 dB	Max. 1 dB	Max. 0.5 dB	Max. 1 dB	Max. 1 dB
Insertion loss (insertion attenuation)	Max. 2 dB	Max. 2 dB	Max. 2.5 dB	Max. 2 dB	Max. 2.5 dB	Max. 2 dB	Max. 2 dB	Max. 2.5 dB
Guaranteed attenuation	Min. 40 dB Within $\pm 1$ MHz	Min. 40 dB Within $\pm 1$ MHz	Min. 60 dB Within $\pm 1$ MHz	Min. 30 dB Within $\pm 1$ MHz	Min. 60 dB Within $\pm 1$ MHz	Min. 30 dB Within $\pm 1$ MHz	Min. 30 dB Within $\pm 1$ MHz	Min. 60 dB Within $\pm 1$ MHz
Spurious characteristics	Min. 18 dB Within $\pm 1$ MHz	Min. 18 dB Within $\pm 1$ MHz	Min. 40 dB Within $\pm 1$ MHz	Min. 15 dB Within $\pm 1$ MHz	Min. 40 dB Within $\pm 1$ MHz	Min. 18 dB Within $\pm 1$ MHz	Min. 15 dB Within $\pm 1$ MHz	Min. 40 dB Within $\pm 1$ MHz
Terminating impedance	3 k $\Omega$ // 2.5 pF	2.5 k $\Omega$ // 2.5 pF	3 k $\Omega$ // 1.5 pF Cc = 5 pF	3.9 k $\Omega$ // 1 pF	3.9 k $\Omega$ // 0 pF Cc = 2 pF	5 k $\Omega$ // -1 pF	5 k $\Omega$ // -1 pF	5 k $\Omega$ // -1.8 pF Cc = 1 pF
Operating temperature range	-20 to +70 °C		-20 to +70 °C	-20 to +70 °C		-20 to +70 °C		-20 to +70 °C
Package type	D-359-A	D-351-A	D-359-B	D-359-A	D-359-B	D-359-A	D-351-A	D-359-B
Ordering code	10T15AN-10.7M-MN15-256	10U15A-10.7M-MN15-296	10T15BK-10.7M-MN15-235	10T20AL-10.7M-MN15-255	10T20BA-10.7M-MN15-335	10F30A-10.7M-MN15-134	10U30AA-10.7M-MN15-342	10F30B-10.7M-MN15-135

### ■ Dimensions

