Crystal Filter

Crystal Bridge to the Future

10.7 MHz-Series MCF

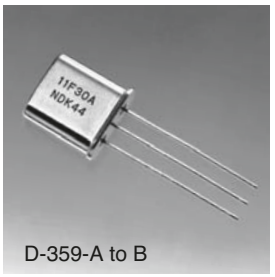
■ Features

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.

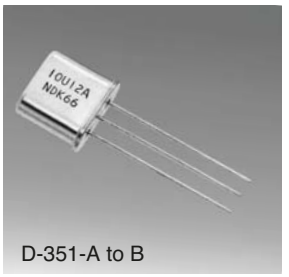
- Compact and light.
- Stable temperature characteristics.
- Structure highly resistant to vibration and shock.

Pb Free

RoHS Compliant
Directive 2002/95/EC



D-359-A to B



D-351-A to B

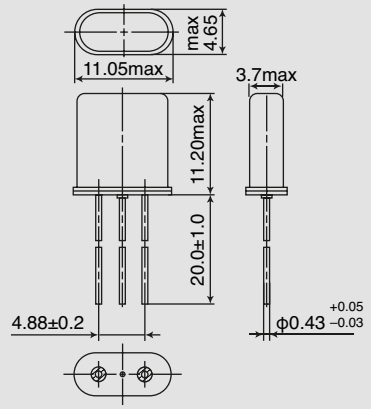
■ Specifications

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. ±3.75 kHz			Min. ±6 kHz		
Stop bandwidth	Max. ±15 kHz at 18 dB	Max. ±18 kHz at 18 dB	Max. ±12.5 kHz at 40 dB	Max. ±22 kHz at 18 dB	Max. ±22 kHz at 18 dB	Max. ±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 ±1 MHz	Min. 30 dB Within ±1 MHz	Min. 60 dB Within ±1 MHz	Min. 30 dB Within ±1 MHz	Min. 30 dB Within ±1 MHz	Min. 60 dB Within ±1 MHz
Spurious characteristics	Min. 18 dB Within ±1 MHz	Min. 18 dB Within ±1 MHz	Min. 40 dB Within ±1 MHz	Min. 18 dB Within ±1 MHz	Min. 18 dB Within ±1 MHz	Min. 40 dB Within ±1 MHz
Terminating impedance	1.5 kΩ // 5 pF	1.8 kΩ // 4 pF	1.5 kΩ // 4.5 pF Cc = 17 pF	2.3 kΩ // 3 pF	2.3 kΩ // 3 pF	3 kΩ // 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	–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

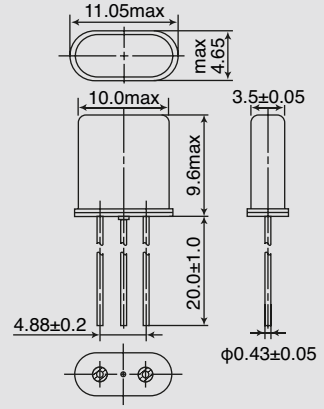
Model	10T15AN	10U15A	10T15BK	10T20AL	10T20BA	10F30A	10U30AA	10F30B
Number of poles	2		4	2	4	2		4
Nominal frequency	10.7MHz							
3 dB Passband width	Min. ±7.5 kHz			Min. ±10 kHz		Min. ±15 kHz		
Stop bandwidth	Max. ±25 kHz at 18 dB	Max. ±25 kHz at 18 dB	Max. ±25 kHz at 40 dB	Max. ±34 kHz at 18 dB	Max. ±34 kHz at 40 dB	Max. ±50 kHz at 18 dB	Max. ±50 kHz at 18 dB	Max. ±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 ±1 MHz	Min. 40 dB Within ±1 MHz	Min. 60 dB Within ±1 MHz	Min. 30 dB Within ±1 MHz	Min. 60 dB Within ±1 MHz	Min. 30 dB Within ±1 MHz	Min. 30 dB Within ±1 MHz	Min. 60 dB Within ±1 MHz
Spurious characteristics	Min. 18 dB Within ±1 MHz	Min. 18 dB Within ±1 MHz	Min. 40 dB Within ±1 MHz	Min. 15 dB Within ±1 MHz	Min. 40 dB Within ±1 MHz	Min. 18 dB Within ±1 MHz	Min. 15 dB Within ±1 MHz	Min. 40 dB Within ±1 MHz
Terminating impedance	3 kΩ // 2.5 pF	2.5 kΩ // 2.5 pF	3 kΩ // 1.5 pF Cc = 5 pF	3.9 kΩ // 1 pF	3.9 kΩ // 0 pF Cc = 2 pF	5 kΩ // –1 pF	5 kΩ // –1 pF	5 kΩ // –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	–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

D-359-A to B (NR-18T(3)Type) mm



D-351-A to B (NR-18T2(3)Type) mm



Model : 10T7.5BH