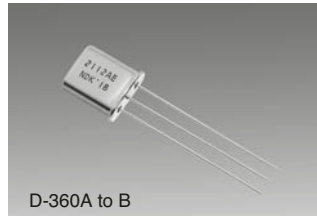


## Fundamental 21.4 MHz- and 45 MHz-Series MCF

### ■ Features

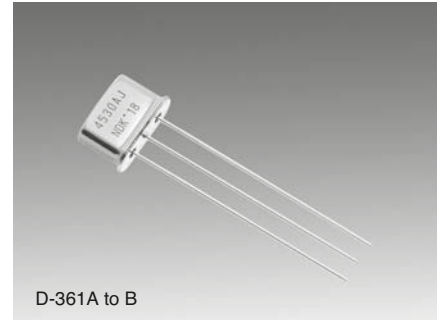
- Compact and light.
- Structure highly resistant to vibration and shock.



D-360A to B

Pb Free

RoHS Compliant  
Directive 2002/95/EC



D-361A to B

### ■ Specifications

Model	21N7.5A	21N7.5B	21N15A	21N15B	21N30A	21N30B
Number of poles	2	4	2	4	2	4
Nominal frequency	21.4MHz					
3 dB Passband width	Min. $\pm 3.75$ kHz		Min. $\pm 7.5$ kHz		Min. $\pm 15$ kHz	
Stop bandwidth	Max. $\pm 18$ kHz at 18 dB	Max. $\pm 14$ kHz at 40 dB	Max. $\pm 30$ kHz at 18 dB	Max. $\pm 25$ kHz at 40 dB	Max. $\pm 50$ kHz at 18 dB	Max. $\pm 50$ kHz at 40 dB
Ripple	Max. 0.5 dB	Max. 1 dB	Max. 0.5 dB	Max. 1 dB	Max. 0.5 dB	Max. 1 dB
Insertion loss (insertion attenuation)	Max. 2 dB	Max. 2.5 dB	Max. 2 dB	Max. 2.5 dB	Max. 2 dB	Max. 2.5 dB
Guaranteed attenuation	Min. 30 dB Within $\pm 1$ MHz	Min. 80 dB at $-(200$ to $1000)$ kHz Min. 65 dB at $+(350$ to $1000)$ kHz	Min. 30 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
Spurious characteristics	Min. 18 dB Within $\pm 1$ MHz	—	Min. 18 dB Within $\pm 1$ MHz	Min. 40 dB Within $\pm 1$ MHz	Min. 7 dB Within $\pm 1$ MHz	Min. 35 dB Within $\pm 1$ MHz
Terminating impedance	$850 \Omega // 6$ pF	$850 \Omega // 5$ pF $C_c = 16$ pF	$1.6$ k $\Omega // 1.3$ pF	$1.6$ k $\Omega // 1$ pF $C_c = 7$ pF	$2.3$ k $\Omega // 1$ pF	$2.3$ k $\Omega // 1$ pF $C_c = 3.5$ 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-360-A	D-360-B	D-360-A	D-360-B	D-360-A	D-360-B
Ordering code	21N7.5A-21.4M-MN15-083	21N7.5B-21.4M-MN15-102	21N15A-21.4M-MN15-060	21N15B-21.4M-MN15-055	21N30A-21.4M-MN15-281	21N30B-21.4M-MN15-091

Model	45S7.5AA	45S7.5BF	45S15A	45S15BU	45S30AJ	45S30BN
Number of poles	2	4	2	4	2	4
Nominal frequency	45MHz					
3 dB Passband width	Min. $\pm 3.75$ kHz		Min. $\pm 7.5$ kHz		Min. $\pm 15$ kHz	
Stop bandwidth	Max. $\pm 12.5$ kHz at 10 dB	Max. $\pm 12.5$ kHz at 25 dB	Max. $\pm 30$ kHz at 18 dB	Max. $\pm 22$ kHz at 25 dB	Max. $\pm 50$ kHz at 15 dB	Max. $\pm 50$ kHz at 35 dB
Ripple	Max. 1 dB	Max. 1 dB	Max. 1 dB	Max. 1 dB	Max. 1 dB	Max. 1 dB
Insertion loss (insertion attenuation)	Max. 2 dB	Max. 4 dB	Max. 2 dB	Max. 4 dB	Max. 2 dB	Max. 4 dB
Guaranteed attenuation	Min. 65dB at $-910$ kHz	Min. 80dB at $-910$ kHz	Min. 60 dB at $-(900$ to $910)$ kHz Min. 40 dB at $+(300$ to $1000)$ kHz	Min. 80 dB at $-910$ kHz	Min. 40 dB at $-910$ kHz	Min. 80 dB at $-910$ kHz
Spurious characteristics	Min. 20 dB Within $\pm 1$ MHz	Min. 40 dB Within $\pm 1$ MHz	—	Min. 40 dB Within $\pm 1$ MHz	Min. 5 dB Within $\pm 1$ MHz	Min. 20 dB Within $\pm 1$ MHz
Terminating impedance	$200 \Omega // 4$ pF	$350 \Omega // 6.5$ pF $C_c = 18$ pF	$470 \Omega // 6$ pF	$650 \Omega // 3$ pF $C_c = 9$ pF	$1.2$ k $\Omega // 1.5$ pF	$800 \Omega // 1.8$ pF $C_c = 6.5$ 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-361-A	D-361-B	D-361-A	D-361-B	D-361-A	D-361-B
Ordering code	45S7.5AA-45M-MN15-210	45S7.5BF-45M-MN15-384	45S15A-45M-MN15-229	45S15BU-45M-MN15-239	45S30AJ-45M-MN15-237	45S30BN-45M-MN15-236

### ■ Dimensions

