

MXR 12

High Capacitance X7R Multilayer Capacitors

Features

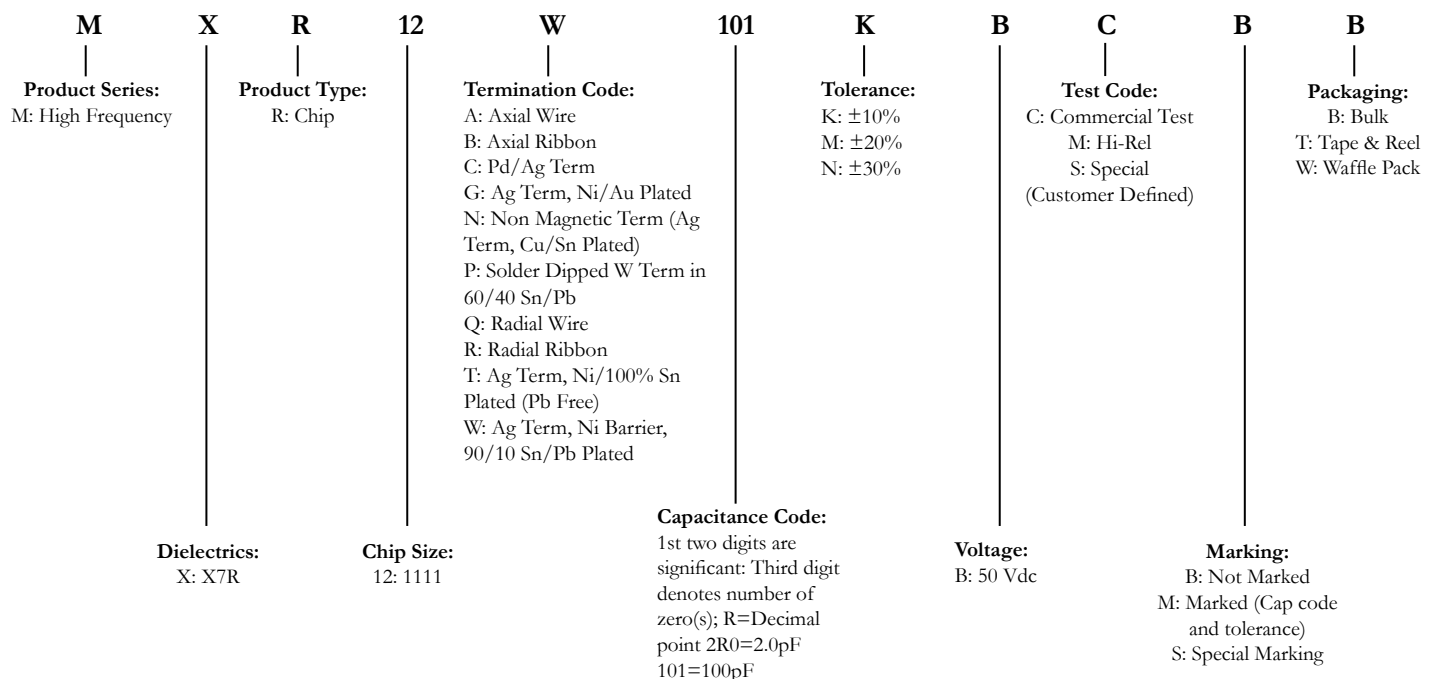
- Capacitance Range: 5000pF to 0.10μF
- Operating Temperature: -55°C to +125°C
- Rated Voltage: 50V
- Encapsulation Options for Leaded MXR12 Series
- High Permittivity Low Loss Dielectric
- X7R Temperature Characteristics
- Low ERS/ESL
- Low Loss



Applications:

Typical Functional Applications: bypass, coupling, dc blocking and in switch mode power supplies and other high power circuits.

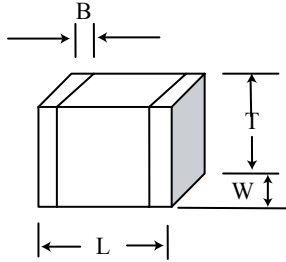
AFM Part Number Code



MXR 12

High Capacitance X7R Multilayer Capacitors

Chip Dimensions



Length	.110in (2.79mm)
Width	.110in (2.79mm)
Thickness	.102in (2.59mm)
Band	.015in (0.38mm)

Standard Capacitance Values

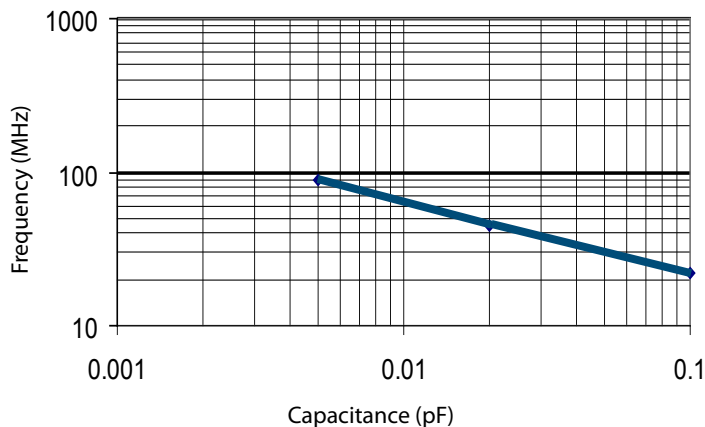
CAP Code	Cap	Tol	WVdc	CAP Code	Cap	Tol	WVdc
502	5000pF	K, M, N	50	273	0.027μF	K, M, N	50
562	5600pF			333	0.033μF		
682	6800pF			393	0.039μF		
822	8200pF			473	0.047μF		
103	0.010μF			503	0.050μF		
123	0.012μF			563	0.056μF		
153	0.015μF			683	0.068μF		
183	0.018μF			823	0.082μF		
203	0.020μF			104	0.100μF		
223	0.022μF						

Specification and Performance

Piezoelectric and Aging Effect:	3% Per Decade
Temperature Range:	-55°C to +125°C
Temperature Coefficient of Capacitance:	0±15% Max
Dissipation Factor:	0.025 max at 1KHz and +25°C
Insulation Resistance (IR, at Rated Voltage):	>10 ⁴ MΩ at +25°C >10 ³ MΩ at +125°C
Dielectric Withstand Voltage (DWV):	250% of rated WVDC for 5 secs
Capacitance Drift:	±0.02% or ±0.02pF, whichever is greater
Dielectric Absorption:	≤2%

Performance Curve

Resonance vs. Capacitance



ESR vs. Capacitance

