



X7R RF By-Pass Capacitors

1111X (0.110" x 0.110")

≠ Product Features

- High Q
- High Power
- Low ESR/ESL
- Low Noise
- High Self-Resonance
- Ultra Stable Performance
- Capacitance Range:
470pF to 10nF
- Working Voltage: 50V

≠ Product Applications

Typical Functional Applications:

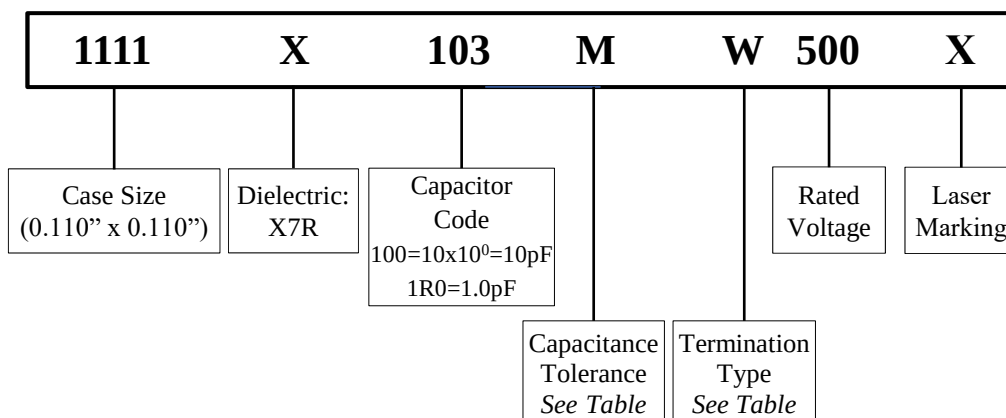
- Tuning • Bypass • Coupling
- Feedback • D.C. Blocking
- Impedance Matching

Typical Circuit Applications:

- UHF/Microwave RF Power Amplifiers
- Mixers • Oscillators • Filter Networks
- Low Noise Amplifiers • Timing Circuits and Delay Lines

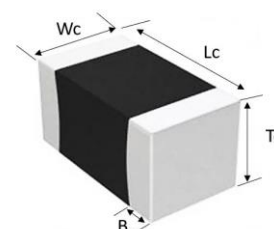


≠ Part Numbering



≠ Capacitor Dimensions Unit: $\frac{\text{inch}}{\text{mm}}$

Length		Width	Thickness	Overlap
Lc		Wc	Tc	B
0.11	+0.025 -0.010	0.110 ± 0.015	0.102 max	0.020 ± 0.010
(2.79	+0.64 -0.25)	(2.79 ± 0.38)	(2.59 max)	(0.508 ± 0.250)





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≠ Capacitance Tolerance Codes

Code	K	M
Tol.	±10%	±20%

≠ Termination Types

Termination Code	Termination
W	100% Tin Solder over Nickel Barrier
L	90%Tin/10%Lead Solder over Nickel Barrier
P (Non-Magnetic)	100% Tin Solder over Copper Barrier
C	100% Silver Solder over Palladium Barrier

Note: "Non-Magnetic" means no magnetic materials.

≠ 1111X Capacitance Values

Special capacitances, tolerances and WVDC are available. Please contact PPI.

Cap. pF	Cap Code	Tol.	Rated WVDC	Cap. pF	Cap Code	Tol.	Rated WVDC	Cap. pF	Cap Code	Tol.	Rated WVDC
4700	472	K,M	50V	15000	153	K,M	50V	47000	473	K,M	50V
5600	562			18000	183			50000	503		
6800	682			22000	223			56000	563		
8200	822			27000	273			68000	683		
10000	103			33000	333			82000	823		
12000	123			39000	393			100000	104		



⚡ Electrical Specifications

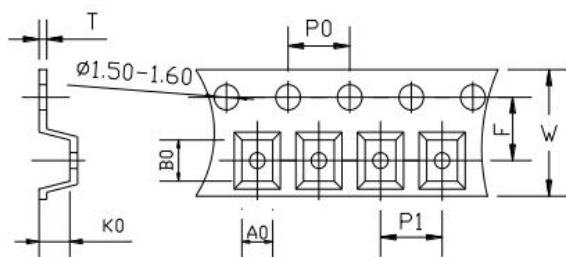
Operating Temperature Range	-55°C to +125°C
Insulation Resistance (IR)	Insulation Resistance @ +25°C > 1000ΩF Insulation Resistance @ +125°C > 100ΩF
Temperature Coefficient	+15%; (-55°C to +125°C)
Dielectric Withstanding Voltage (DWV)	2.5x WVDC, 5 seconds
Max Dissipation Factor	0.025 (2.5%) max
Test Parameters	1kHz, 1.0 VRMS, 25°C

⚡ Recommended Land Pattern Dimensions

Regarding Landing Patterns, please refer to IPC-7351B (table 3-5, 3-6).

⚡ Tape & Reel Specifications (mm)

Orientation	Measurement Unit	W	P0	P1	T	F	Min. Qty per Reel	Std. Qty per Reel	Tape Material
H	in.	0.32	0.16	0.16	0.01	0.14	500	2000	Plastic
	mm	8.00	4.00	4.00	0.30	3.50			



A₀B₀K₀

- Determined by component size. Typical clearance between the cavity and the component is: .50 (.002) min to .65 (.026) max for 12mm tape.
- The component cannot rotate more than 20° within the determined cavity.