

Capacitive Reactance

$$X_C = \frac{1}{2\pi fC}$$

X_C	capacitive reactance	ohms (Ω)
f	frequency	hertz (Hz)
C	capacitance	farad (F)

Find the missing variables.

1. $X_C =$ 159m Ω
 $f = 1$ Hz
 $C = 1$ H

2. $X_C =$ 80 Ω
 $f = 2$ Hz
 $C = 1$ mH

3. $X_C =$ _____
 $f = 0.3$ Hz
 $C = 4.3$ H

4. $X_C =$ _____
 $f = 1.6$ MHz
 $C = 3$ μ H

5. $X_C =$ _____
 $f = 3.7$ Hz
 $C = 2.8$ H

6. $X_C =$ _____
 $f = 5.6$ Hz
 $C = 0.06$ mH

7. $X_C = 10\Omega$
 $f =$ _____
 $C = 2$ H

8. $X_C = 10k\Omega$
 $f =$ _____
 $C = 1$ H

9. $X_C = 5\Omega$
 $f =$ _____
 $C = 1$ H

10. $X_C = 300\Omega$
 $f =$ _____
 $C = 1.8$ mH

11. $X_C = 10k\Omega$
 $f =$ _____
 $C = 1$ mH

12. $X_C = 1.1k\Omega$
 $f =$ _____
 $C = 1$ μ H

13. $X_C = 150\Omega$
 $f = 150$ mHz
 $C =$ _____

14. $X_C = 1k\Omega$
 $f = 150$ μ Hz
 $C =$ _____

15. $X_C = 1.1k\Omega$
 $f = 150$ Hz
 $C =$ _____

16. $X_C = 1k\Omega$
 $f = 1$ mHz
 $C =$ _____

17. $X_C = 15\Omega$
 $f = 1$ MHz
 $C =$ _____

18. $X_C = 300\Omega$
 $f = 10$ MHz
 $C =$ _____

19. $X_C =$ _____
 $f = 11$ kHz
 $C = 1$ mH

20. $X_C = 15\Omega$
 $f =$ _____
 $C = 1$ μ H

21. $X_C = 300\Omega$
 $f = 150$ Hz
 $C =$ _____

22. $X_C =$ _____
 $f = 170$ MHz
 $C = 1$ μ H

23. $X_C = 300\Omega$
 $f =$ _____
 $C = 1$ μ H

24. $X_C = 300\Omega$
 $f = 250$ MHz
 $C =$ _____