



MINIATURE TUBULAR AT STRIP CRYSTALS - CY309 & CY310 Series

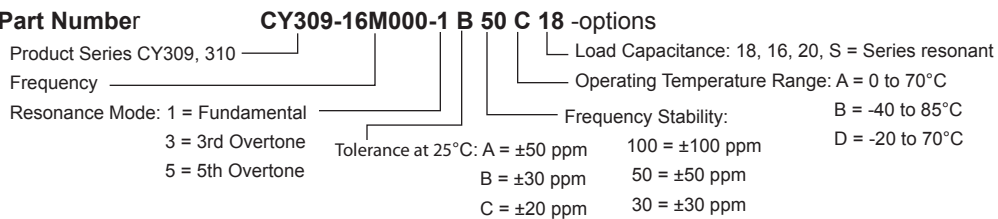
FEATURES

- RoHS Compliant (Pb-Free), Miniature Size with the Smallest Footprint of any Crystal Package
- AT-cut Characteristic, Excellent Aging, Extended Temperature Range
- Excellent Shock and Vibration Resistance
- Cost Effective

SPECIFICATIONS

Frequency Range	CY310: 3.579545 MHz to 4.000 MHz; CY309: 4.000 MHz to 70.000 MHz
Package Option	CY310 = 3 x 10 mm cylindrical package; CY309 = 3 x 9 mm cylindrical package
Resonance Mode	1 = Fundamental (3.5 to 30 MHz); 3 = 3rd Overtone (30.001 to 70 MHz)
Calibration Tolerance @25°C	A = ±50 ppm, Standard; B = ±30 ppm
Frequency Stability Ref @25°C	100 = ±100 ppm; 50 = ±50 ppm; 30 = ±30 ppm
Temperature Range	A = 0°C to 70°C; B = -40°C to 85°C; C = -10°C to 60°C; D = -20°C to 70°C
Crystal Aging	±5 ppm / year Maximum
Storage Temperature	-40°C to 85°C
Load Capacitance (CL)	CL = 18 pF (Standard), 16 pF, 20 pF, others, or S = Series resonant
Shunt Capacitance	7 pF Maximum
Drive Level	0.1 mW Maximum

Creating a Part Number



Equivalent Series Resistance

Frequency (MHz)	Mode	Max ESR (Ohms)
3.579545 - 3.999	Fund	200
4.000 - 4.999	Fund	150
5.000 - 5.999	Fund	120
6.000 - 6.999	Fund	100
7.000 - 8.999	Fund	80
9.000 - 9.999	Fund	60
10.000 - 12.999	Fund	50

Frequency (MHz)	Mode	Max ESR (Ohms)
13.000 - 18.999	Fund	35
19.000 - 30.000	Fund	25
30.001 - 35.999	3rd O/T	100
36.000 - 70.000	3rd O/T	80

OUTLINE DRAWING

