

CQ Series

4 Pin HC-49/US SMD Microprocessor Crystal

Lead-Free
RoHS Compliant

CALIBER
Electronics Inc.

PART NUMBERING GUIDE

Environmental/Mechanical Specifications on page F5

Package CQ =HC49/US SMD (4.00mm max. ht.)		CQ A 32 C 3 - 30.000MHz - A	
Tolerance/Stability A=±50/100 B=±30/50 C=±15/30 D=±15/50 E=±25/30 F=±25/50 G=±10/30 H=±20/20 J=± 5/10 K=±20/20 L=±10/25 M=±15/15		Configuration Options A Option (See Below) B Option (See Below)	
		Mode of Operation 1=Fundamental (over 25.000MHz AT and BT Cut Available) 3=Third Overtone, 5=Fifth Overtone	
		Operating Temperature Range C=0°C to 70°C E=-20°C to 70°C F=-40°C to 85°C	
		Load Capacitance S=Series, XX=XXpF (Pico Farads)	

ELECTRICAL SPECIFICATIONS

Revision: 1997-A

Frequency Range	3.579545MHz to 100.000MHz
Frequency Tolerance/Stability A, B, C, D, E, F, G, H, J, K, L, M	See above for details! Other Combinations Available. Contact Factory for Custom Specifications.
Operating Temperature Range "C" Option, "E" Option, "F" Option	0°C to 70°C, -20°C to 70°C, -40°C to 85°C
Aging	±5ppm / year Maximum
Storage Temperature Range	-55°C to 125°C
Load Capacitance "S" Option "XX" Option	Series 10pF to 50pF
Shunt Capacitance	7pF Maximum
Insulation Resistance	500 Megaohms Minimum at 100Vdc
Drive Level	2mWatts Maximum, 100uWatts Correlation

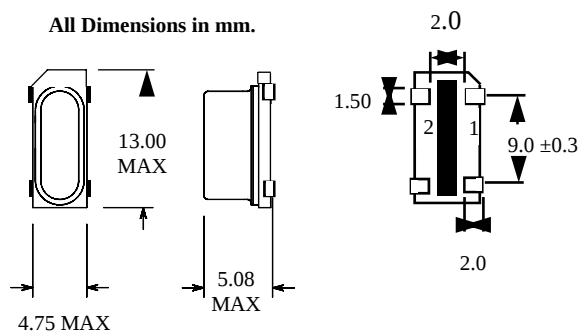
EQUIVALENT SERIES RESISTANCE (ESR)

Frequency (MHz)	ESR (ohms)	Frequency (MHz)	ESR (ohms)	Frequency (MHz)	ESR (ohms)
3.579545 to 4.999	200	9.000 to 9.999	80	24.000 to 30.000	40 (AT Cut Fund)
5.000 to 5.999	150	10.000 to 14.999	70	24.000 to 50.000	40 (BT Cut Fund)
6.000 to 7.999	120	15.000 to 15.999	60	24.576 to 29.999	100 (3rd OT)
8.000 to 8.999	90	16.000 to 23.999	50	30.000 to 60.000	100 (3rd OT)

MECHANICAL DIMENSIONS

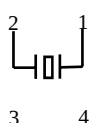
Marking Guide

All Dimensions in mm.

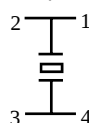


OUTPUT PIN CONFIGURATION

"A" Option



"B" Option



12.000CYM

12.000 = Frequency
C = Caliber Electronics Inc.
YM = Date Code (Year/Month)

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