

N Series

2.0mm 4 Pin Ceramic Surface Mount Crystal

Lead-Free
RoHS Compliant

CALIBER
Electronics Inc.

PART NUMBERING GUIDE		Environmental/Mechanical Specifications on page F5	
Package _____ N= 2.0mm max. ht. / 4 Pad Ceramic SMD Tolerance/Stability _____ A=±50/100 B=±50/50 C=±30/50 D=±30/30	N A 32 C 1 - 30.000MHz	Mode of Operation 1=Fundamental 3=Third 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: 1994-A
Frequency Range	3.500MHz to 30.000MHz	
Frequency Tolerance/Stability A, B, C, D	See above for details! Other Combinations Available. Contact Factory for Custom Specifications.	
Operating Temperature Range "C" Option, "E" Option, "F" Option	-30°C to 70°C	
Aging @ 25°C	±5ppm / year Maximum	
Storage Temperature Range	-55°C to 125°C	
Load Capacitance "S" Option "XX" Option	Series 8pF to 50pF	
Shunt Capacitance	7pF Maximum	
Insulation Resistance	500 Megaohms Minimum at 100Vdc	
Drive Level	500uW Maximum, 100uW correlation	

EQUIVALENT SERIES RESISTANCE (ESR)		
Frequency Range (MHz)	ESR (ohms)	Mode / Cut
3.500 to 3.000	300	Fundamental / AT
4.000 to 7.999	200	Fundamental / AT
8.000 to 9.999	100	Fundamental / AT
20.000 to 30.000	80	Fundamental / AT

MECHANICAL DIMENSIONS

Recommended Soldering Pattern
(UNIT=mm)

Electrode Arrangement