

## PART NUMBERING GUIDE

Environmental/Mechanical Specifications on page F5

### Package

A=HC49/U

### Tolerance/Stability

A=±50/100

N=±10/10ppm

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

**A A 32 C 3 - 30.000MHz - I - AT**

### Configuration Options

I=Insulator Tab, TR=Tape and Reel (ammo for thru-hole), L=Third Lead

L3=Third Lead/Base Mount, V=Vinyl Sleeve, AT=Cut of Quartz

SP=Spring Mount, G=Gull Wing, G1=Gull Wing/Metal Jacket

### 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

G=-20°C to 85°C / F=-40°C to 85°C

### Load Capacitance

S=Series, XX=XXpF (Pico Farads)

## ELECTRICAL SPECIFICATIONS

Revision: 1994-D

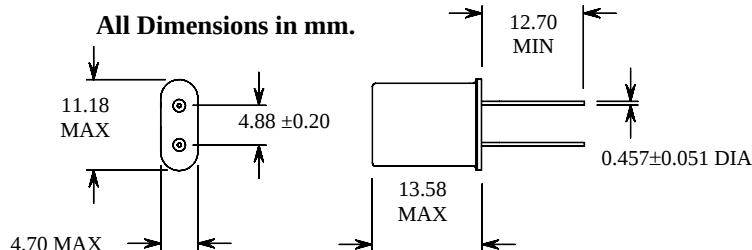
|                                                                     |                                                                                                    |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Frequency Range                                                     | 1.000MHz to 200.000MHz                                                                             |
| Frequency Tolerance/Stability<br>A, B, C, D, E, F, G, H, J, K, L, M | See above for details!<br>Other Combinations Available. Contact Factory for Custom Specifications. |
| Operating Temperature Range<br>"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<br>"S" Option<br>"XX" Option                       | Series<br>10pF to 50pF                                                                             |
| Shunt Capacitance                                                   | 7pF Maximum                                                                                        |
| Insulation Resistance                                               | 500 Megaohms Minimum at 100Vdc                                                                     |
| Drive Level                                                         | 2mWatts Maximum, 100uWatts Correlation                                                             |
| Solder Temp (Max.) / Plating / Moisture Sensitivity                 | 260°C maximum / Sn-Ag-Cu / None                                                                    |

## EQUIVALENT SERIES RESISTANCE (ESR)

| Frequency (MHz) | ESR (ohms) | Frequency (MHz)    | ESR (ohms) | Frequency (MHz)           | ESR (ohms) |
|-----------------|------------|--------------------|------------|---------------------------|------------|
| 1.000           | 2000       | 3.579545           | 180        | 6.000 to 6.400            | 50         |
| 1.8432          | 650        | 3.6864             | 150        | 7.15909 to 7.3728         | 40         |
| 2.000           | 550        | 3.93216 to 4.000   | 120        | 8.0640 to 9.8304          | 35         |
| 2.4576          | 350        | 4.096              | 100        | 10.000 to 12.28890        | 30         |
| 3.000           | 250        | 4.194304 to 4.9152 | 80         | 12.960 to 30.000 (Fund)   | 25         |
| 3.2768          | 200        | 5.000 to 5.068     | 65         | 24.000 to 50.000 (3rd OT) | 40         |

## MECHANICAL DIMENSIONS

## Marking Guide



Line 1: Caliber  
Line 2: Part Number  
Line 3: Frequency  
Line 4: Date Code