

**PART NUMBERING GUIDE**

**Environmental/Mechanical Specifications on page F5**

|                                  |         |                                                        |  |
|----------------------------------|---------|--------------------------------------------------------|--|
|                                  |         | <b>C A 32 C 3 - 30.000MHz</b>                          |  |
| <b>Package</b>                   |         |                                                        |  |
| C =HC49/US SMD (4.50mm max. ht.) |         |                                                        |  |
| CS=HC49/US SMD (3.50mm max. ht.) |         |                                                        |  |
| CR=HC49/US SMD (3.20mm max. ht.) |         |                                                        |  |
| <b>Tolerance/Stability</b>       |         |                                                        |  |
| A=±50/100                        | N=±5/10 |                                                        |  |
| B=±30/50                         |         |                                                        |  |
| C=±15/30                         |         |                                                        |  |
| D=±15/50                         |         |                                                        |  |
| E=±25/30                         |         |                                                        |  |
| F=±25/50                         |         |                                                        |  |
| G=±10/30                         |         |                                                        |  |
| H=±20/20                         |         |                                                        |  |
| J=± 30/30                        |         |                                                        |  |
| K=±20/20                         |         |                                                        |  |
| L=±10/25                         |         |                                                        |  |
| M=±15/15                         |         |                                                        |  |
|                                  |         |                                                        |  |
|                                  |         |                                                        |  |
|                                  |         |                                                        |  |
|                                  |         | <b>Mode of Operation</b>                               |  |
|                                  |         | 1=Fundamental (over 25.000MHz AT and BT Cut Available) |  |
|                                  |         | 3=Third Overtone, 5=Fifth Overtone                     |  |
|                                  |         | <b>Operating Temperature Range</b>                     |  |
|                                  |         | C=0°C to 70°C                                          |  |
|                                  |         | E=-20°C to 70°C                                        |  |
|                                  |         | F=-40°C to 85°C                                        |  |
|                                  |         | <b>Load Capacitance</b>                                |  |
|                                  |         | S=Series, XX=XXpF (Pico Farads)                        |  |

**ELECTRICAL SPECIFICATIONS**

Revision: 1994-F

|                                                                            |                                                                                                    |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| <b>Frequency Range</b>                                                     | 3.579545MHz to 100.000MHz                                                                          |
| <b>Frequency Tolerance/Stability</b><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. |
| <b>Operating Temperature Range</b><br>"C" Option, "E" Option, "F" Option   | 0°C to 70°C, -20°C to 70°C, -40°C to 85°C                                                          |
| <b>Aging</b>                                                               | ±5ppm / year Maximum                                                                               |
| <b>Storage Temperature Range</b>                                           | -55°C to 125°C                                                                                     |
| <b>Load Capacitance</b><br>"S" Option<br>"XX" Option                       | Series<br>10pF to 50pF                                                                             |
| <b>Shunt Capacitance</b>                                                   | 7pF Maximum                                                                                        |
| <b>Insulation Resistance</b>                                               | 500 Megaohms Minimum at 100Vdc                                                                     |
| <b>Drive Level</b>                                                         | 2mWatts Maximum, 100uWatts Correlation                                                             |
| <b>Solder Temp. (max) / Plating / Moisture Sensitivity</b>                 | 260°C / Sn-Ag-Cu / None                                                                            |

**EQUIVALENT SERIES RESISTANCE (ESR)**

| Frequency (MHz)   | ESR (ohms) | Frequency (MHz)           | ESR (ohms) | Frequency (MHz)  | ESR (ohms)   |
|-------------------|------------|---------------------------|------------|------------------|--------------|
| 3.579545 to 4.999 | 120        | 9.000 to 12.999           | 50         | 26.000 to 39.999 | 100 (3rd OT) |
| 5.000 to 5.999    | 80         | 13.000 to 19.000          | 40         | 40.000 to 75.000 | 80 (3rd OT)  |
| 6.000 to 6.999    | 70         | 20.000 to 29.000          | 30         |                  |              |
| 7.000 to 8.999    | 60         | 30.000 to 50.000 (BT Cut) | 40         |                  |              |

**MECHANICAL DIMENSIONS**

**Marking Guide**

|                              |  |                                                                                                                    |  |
|------------------------------|--|--------------------------------------------------------------------------------------------------------------------|--|
| <p>All Dimensions in mm.</p> |  | <p><b>12.000CYM</b></p> <p>12.000 = Frequency<br/>C = Caliber Electronics Inc.<br/>YM = Date Code (Year/Month)</p> |  |
|------------------------------|--|--------------------------------------------------------------------------------------------------------------------|--|