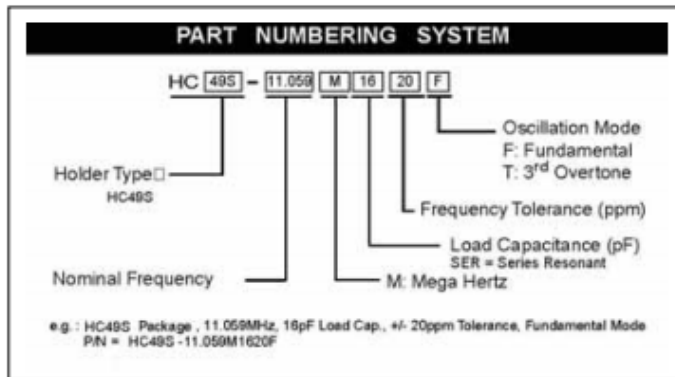




## HC49S METAL PACKAGE CRYSTAL RESONATOR



### Application

Microprocessor Clock, Network Card, A/V Card  
Cable Modem, Disc Drive, Hand-held products,  
Notebook Computer, Bluetooth, Mp3 Player.

### Features

The HC49S is Metal Package with resistance  
Weld Sealed, Lead-free compliance, high reliable,  
tight tolerance and stability.

### Generic Specification

Nominal Frequency Range	3.500MHz — 40.000MHz	26.000MHz — 105.000MHz
Vibration Mode	Fundamental	Third Overtone
Temperature Stability at 25°C	+/-20PPM: +/-30PPM: +/-50PPM: +/-100PPM	
Frequency Tolerance at 25°C	+/-10PPM: +/-20PPM: +/-30PPM: +/-50PPM:	
Load Capacitance	Series, 10pF, 12pF, 16pF, 18pF, 20pF	
Operating Temperature Range	-10°C — +60°C : -20°C — +70°C : -40°C — +85°C	
Storage Temperature Range	-40°C — +85°C	
Drive Level	10uW (100uW max.)	
Aging Rate at 25°C	+/-5 PPM per year Max	



External Dimension (Unit: mm)

### Frequency Range and ESR

Nominal Frequency Range	Equivalent Series Resistance		
	AT cut	Fundamental	AT cut Third Overtone
3.500MHz — 3.799MHz		150 Ohm Max	
3.800MHz — 4.099MHz		120 Ohm Max	
4.100MHz — 4.999MHz		100 Ohm Max	
5.000MHz — 5.999MHz		80 Ohm Max	
6.000MHz — 7.999MHz		70 Ohm Max	
8.000MHz — 9.999MHz		60 Ohm Max	
10.000MHz — 11.999MHz		50 Ohm Max	
12.000MHz — 27.999MHz		40 Ohm Max	
28.000MHz — 40.000MHz		30 Ohm Max	
26.000MHz — 39.999MHz			100 Ohm Max
40.000MHz — 105.000MHz			80 Ohm Max

