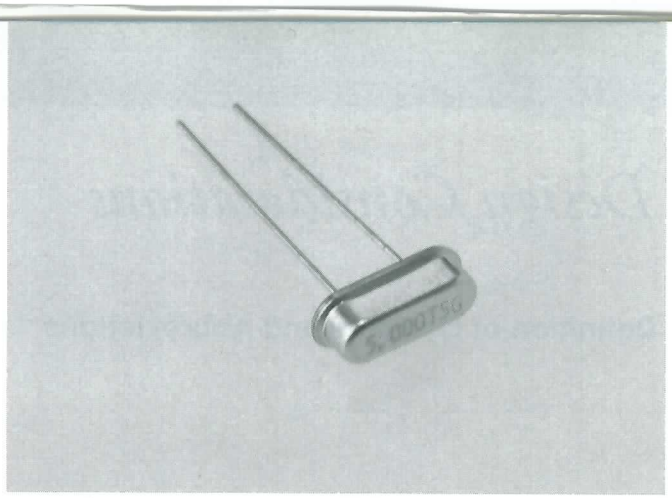
HC-49 / U-90



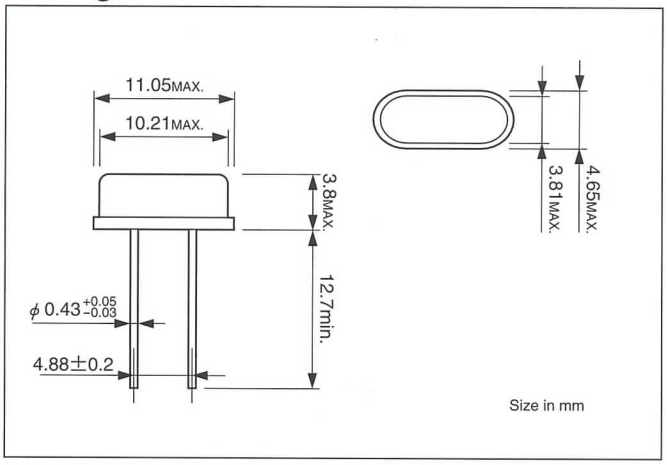
Specifications

Parameters	Specifications
Frequency range	3.5 to 60 MHz
Holder	HC-49 / U-90
Mode of vibration	Fundamental (3.5 to 36 MHz) 3rd overtone (36+ to 60 MHz)
Frequency tolerance	±50ppm (at 25±3℃)
Frequency stability	±100ppm (0 to +70℃, inclusive of frequency tolerance at 25℃)
Operating temperature range	0 to +70℃
Storage temperature range	-55 to +125℃
Load capacitance (C_L)	as mentioned in the table
Resonance resistance (R_r)	as mentioned in the table
Shunt capacitance (C_o)	5pF max.
Drive level	0.5±0.1 mW
Insulation resistance	500MΩ min/DC 100V
Shock	dF/F=±10ppm max., Withstand half sine wave in each 3 directions under 1,000G, 0.35 msec.
Vibration	dF/F=±10ppm max., Withstand each 2 hours in 3 directions under 1 to 2 min. of 10 to 55 Hz, amplitude 0.7 to 0.9 mm (Peak to peak in vibration)
Leak	2×10^{-8} atm·cc/sec. max.

The Table of Standard Frequencies

Part No.	Frequency(MHz)	Rr(Ω)	CL(pF)
TQC-203C-6RS	3.579545	180MAX	16.0±0.2
TQC-246C-6RS	3.6864		
TQC-233C-6RS	3.93216	150	
TQC-204C-6RS	4.0000		
TQC-224C-6RS	4.194304	130	
TQC-234C-6RS	4.433619	120	
TQC-231C-6RS	4.5000		
TQC-235C-6RS	4.9152		
TQC-205C-6RS	5.0000		
TQC-208C-6RS	6.0000	80	
TQC-248C-6RS	7.3728	75	
TQC-210C-6RS	8.0000	70	
TQC-211C-6RS	10.0000	50	
TQC-240C-6RS	10.2400		
TQC-252C-6RS	11.0592		
TQC-226C-6RS	12.0000		
TQC-244C-6RS	12.2880		
TQC-227C-6RS	14.0000		
TQC-241C-6RS	14.31818		
TQC-249C-6RS	14.7456		
TQC-212C-6RS	15.0000		
TQC-228C-6RS	16.0000		
TQC-242C-6RS	17.734475		
TQC-213C-6RS	18.0000		
TQC-214C-6RS	18.4320		
TQC-215C-6RS	19.6608		
TQC-216C-6RS	20.0000		
TQC-243C-6RS	24.0000		
TQC-254A-6RS	32.0000		10.0±0.2
TQC-219C-6RS	48.0000	100	16.0±0.2

TQC-317C-6RS	C_L= 16pF
TQC-317D-6RS	C_L= 32pF
TQC-317S-6RS	C_L= (S)

*Note : The other frequencies and specifications of our MPU crystals ranging from 3.5 to 60MHz are available upon your request.

Package outline