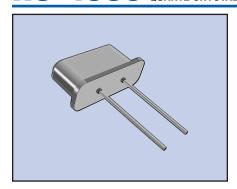
HC-49US QUARTZ CRYSTAL





This product represents our selection of low profile resistance weld type quartz crystals.

OPTIONS:

- extended temperature range
- tighter tolerances
- mylar spacer
- 3rd in line lead base
- radial tape and reel (1,000 pcs)

FEATURES

- Cost effective
- Excellent aging
- Wide frequency range
- Low profile
- Excellent reliability
- "AT strip" blank technology

PART NUMBERING GUIDE "EXAMPLE"

	FREQUENCY (16.0000 MHz)		LOAD CAPACITANCE*		PACKAGE TYPE**	
ECS	- 160	-	20	_	4	

^{*} Load capacitance (xx=xx pF, S= series resonance), ** Package Type examples (4= 3.5mm max. height, 4L= 2.5mm max. height) For extended temp range of -40 to +85°C ad -DN suffix for example ECS-160-20-4-DN Note: See Product Selection Guide for additional options.

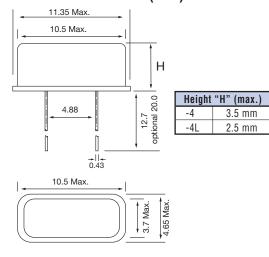
OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

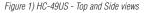
PARAMETERS	CONDITIONS	MINIMUM	MAXIMUM	UNITS
FREQUENCY RANGE	f ₀	3.57	70.000	MHz
FREQUENCY TOLERANCE	@ +25°C		±30	PPM
FREQUENCY STABILITY, ref @ 25°C	Standard -10 ~ +70°C		±50	PPM
	"DN" Option -40 ~ +85°C		±100	PPM
OPERATING TEMPERATURE	Standard	-10	±70	°C
	DN option	-40	+85	°C
STORAGE TEMPERATURE		-40	+105	°C
SHUNT CAPACITANCE	C_0		7.0	pF
LOAD CAPACITANCE C _L (Customer Specified)		10.0	Series	pF
DRIVE LEVEL	EL 3.57 ~ 70.000MHz		0.5	mW
AGING (FIRST YEAR)	@ +25°C		±5.0	PPM

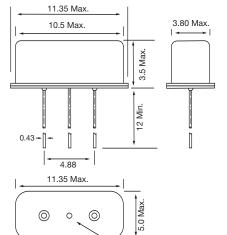
EQUIVALENT SERIES RESISTANCE / MODE OF OSCILLATION

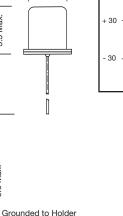
FREQUENCY RANGE (MHz)	MODE	MAX ESR Ω	FREQUENCY RANGE (MHz)	MODE	MAX ESR Ω
3.570 ~ 3.999	Fundamental	200	9.000 ~ 12.999	Fundamental	60
4.000 ~ 4.999	Fundamental	150	13.000 ~ 19.999	Fundamental	40
5.000 ~ 5.999	Fundamental	120	20.000 ~ 30.000	Fundamental	30
6.000 ~ 6.999	Fundamental	100	27.000 ~ 70.000	3rd O/T	100
7.000 ~ 8.999	Fundamental	80			

PACKAGE DIMENSIONS (mm)









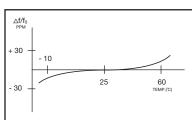


Figure 3) Frequency vs Temperature Curve

Figure 2) HC-49US - 3rd In Line Lead Base - Side & Bottom View

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

ECS:

ECS-107.3-S-4 ECS-162.5-20-4 ECS-147.4-S-4 ECS-184-18-4 ECS-204.8-20-4 ECS-115.2-S-4 ECS-196.6-20-4 ECS-110.5-20-4 ECS-110.5-20-4 ECS-110.5-20-4 ECS-110.5-20-4 ECS-110.5-20-4 ECS-196.6-S-4 ECS-196.6-20-4 ECS-110.5-20-4 ECS-110.5-20-4 ECS-110.5-20-4 ECS-147.4-S-4 ECS-184-18-4 ECS-204.8-20-4 ECS-122.8-S-4 ECS-196.6-20-4 ECS-110.5-20-4 ECS-110.5-20-4 ECS-110.5-20-4 ECS-240.001-18-4 ECS-147.4-20-4 ECS-160.003-18-4 ECS-92.1-20-4 ECS-250-18-4-F-3IL ECS-80-18-4-31L ECS-250-15-4-FX ECS-184-S-4 18.432 MHZ ECS-115.2-18-4B ECS-17.1776-20-4