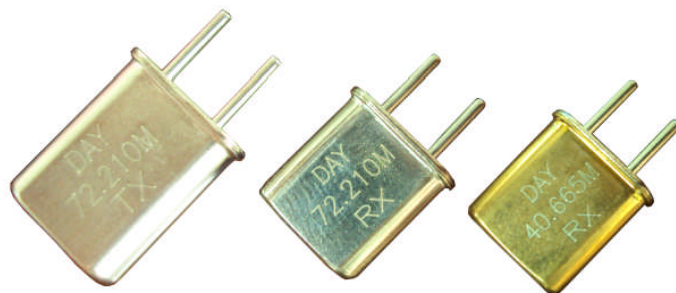


Quartz Crystal Series

HC-50/U (50U)
HC-50/T (50T)

Features

◆RoHS Compliant



Electrical Specifications

Item	Specifications	Remarks
Nominal Frequency Range	1.8432MHz to 30.000MHz	Fund.; AT-Cut
	26.000MHz to 90.000MHz	3 rd O.T.; AT-Cut
	90.001MHz to 150.000MHz	5 rd O.T.; AT-Cut
Frequency Tolerance	±10ppm(Standard) at 25°C±3°C	Others are offered
Load Capacitance	Fund.:10pF to ∞, O.T.:5pF to ∞	Please specify
Series Resistance	As ESR table	
Shunt Capacitance	7pF Max	
Drive Level	0.01μW to 1000μW	1000μW Max
Operating Temperature	-20°C to +70°C(Standard)	Others are offered
Storage Temperature	-55°C to +125°C	
Stability vs. Temperature	±10ppm(Standard)	Others are offered
Insulated Resistance	500MΩ	Minimum at 100Vdc
Aging	±2ppm/year	Maximum

ESR(Series Resistance)

Frequency(MHz)	Mode	Ohm Max	Frequency(MHz)	Mode	Ohm Max
1.8432~6.000	Fund.	150	26.000~90.000	3 rd O.T.	40
6.001~9.999	Fund.	35	90.000~150.000	5 rd O.T.	30
10.000~30.000	Fund.	25			

Stability vs. Temperature

◆ Standard		1	2	3	5	6	7	Remarks
◇ Please specify		±3ppm	±5ppm	±7ppm	±10ppm	±15ppm	±20ppm	
B	-10°C to +60°C	◇				◇		
C	-20°C to +70°C	◇	◇	◇	◆	◇	◇	Standard
D	-40°C to +85°C	◇	◇	◇	◆	◇	◇	

Ordering Information

Q	R	Type	Pin	XX.XXXX	M	Mode	CL pF	Freq.Tolerance at 25°C	Operating Temp.	Stability Vs.Temp.	Option
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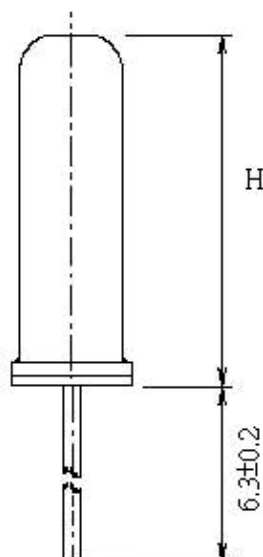
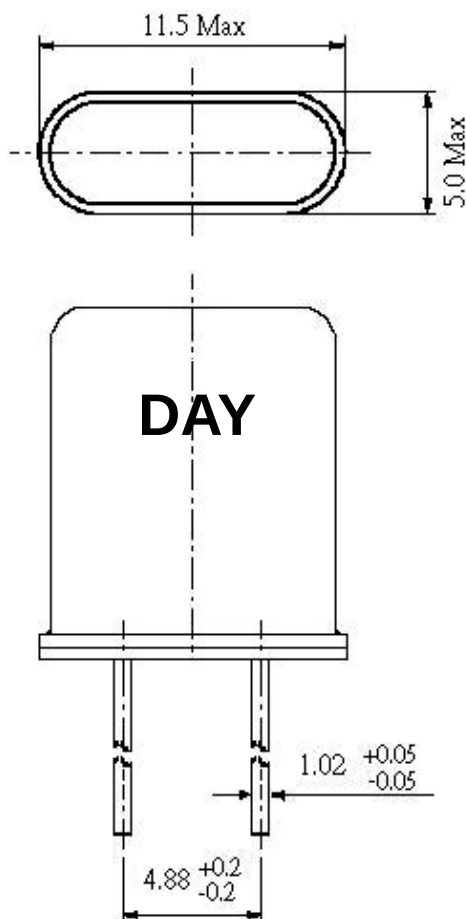
Q:Quartz 50U Blank:2 Center frequency 1.8 to 150.0MHz M: MHz F:Fund.;AT See Table ±3ppm to ±50ppm See Table See Table F:Lead Free
R:Resonator 50T O: 3rd O.T.;AT T:T&R Blank:Bulk

Example:QR50U12.0000MFK1C5F (Crystal,HC-50/U,12.0000MHz,2pins,20pF, ±10ppm,-20 to +70deg, ±10ppm.Lead free,Bulk)

Quartz Crystal Series

HC-50/U
HC-50/T

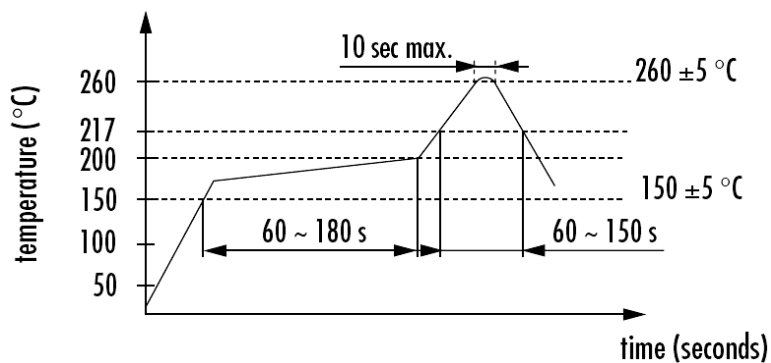
Dimensions



TYPE		H
50U	HC-50/U	13.5 Max.
50T	HC-50/T	10.5 Max.

Unit:mm

Reflow Soldering Profile



Load Capacitance Codes

7pF:	E	8pF:	F	9pF:	B	10pF:	R
12pF:	T	15pF:	H	16pF:	I	18pF:	J
20pF:	K	22pF:	L	25pF:	G	27pF:	M
30pF:	N	32pF:	P	33pF:	W	Series:	S