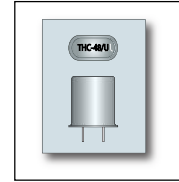


# THC-48/U Crystal Resonator



**FEATURES:**

- Thru-Hole
- Low Frequency

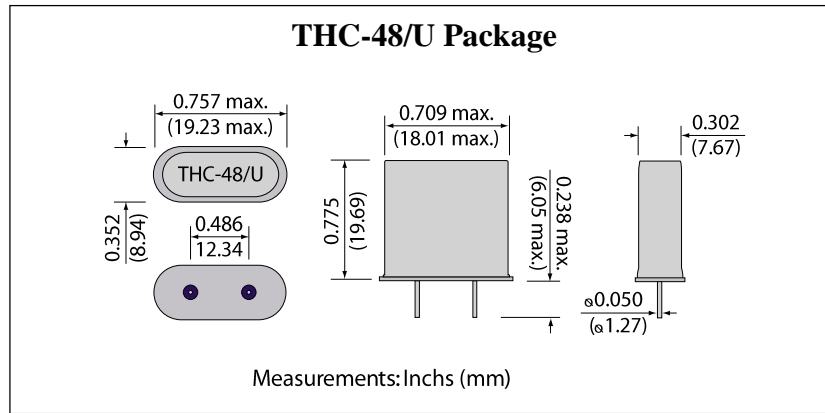
**Low Cost**  
**19.69 x 19.23 x 6.05 mm**

Parameter	Unit	Min.	Typ.	Max.
Frequency Range (FR)		300 kHz	-	12.000 MHz
Operating Temperature Range	°C	See Table		
Frequency Tolerance at 25°C	ppm	±30	±100	±150
Frequency Stability	ppm	±200 ppm max.		
Load Capacitance (C <sub>L</sub> )	pF	30	-	Series
Shunt Capacitance (C <sub>0</sub> )	pF	-	-	7
Equivalent Series Resistance (R)	Ohms	See Table		
Drive Level	µW		100	1000
Aging per year	ppm	-	±3.0	±5.0
Storage Temperature Range	°C	-40	-	85

Frequency (MHz)	ESR (Ohms) max.
Fundamental Mode	
300 kHz to 800 kHz	3000
>800 kHz to 1.000 MHz	1000
>1.8432 to 2.500 MHz	400
>2.500 to 3.500 MHz	200
>3.500 to 7.500 MHz	150
>7.500 to 12.000 MHz	50

Temperature	Stability (ppm)
-10 to +60°C	±30, ±50, ±100, ±150
-20 to +70°C	±30, ±50, ±100, ±150
-40 to +85°C	±30, ±50, ±100, ±150

Environmental	
Terminal Material	KOVAR
Terminal Plating	Sn-Ag-Cu
REACH Compliant	Yes
RoHS Compliant	Yes
RoHS Exemptions	No
Re-flow Temp. Max.	260°C
MSL	1



**Example Part Number:** THC-48/U-D-B-16-18-25M576

THC-48/U -   -   -   -   -  

Tolerance	Stability	Temp. Range	Load Cap.	Frequency
A = ±150	A = ±100	16 = -10 to +60°C	AA = Series	Frequency in MHz
B = ±100	B = ±50	27 = -20 to +70°C	xx = Load	i.e. 25M456
C = ±50		48 = -40 to +85°C	i.e. 16, 24, 32	use M for decimal point
D = ±30				