

U1, U1SL, U5, UIMJ & U5MJ CRYSTALS

- Tight tolerance and stability, ideal for comms. applications
- AT-Cut round crystal blank, optimized for low harmonics
- Available up to 200MHz using 5th overtone mode
- Annealed and pre-aged for low frequency drift

DESCRIPTION

U1 and U5 crystals are a well established design, and widely used, particularly in telecommunications applications where their compact size and ability to be produced with close tolerances makes them an ideal crystal. A 'Slimline' package (U1SL) and a surface mount (U1MJ) version is also available.

SPECIFICATION

Frequency Range			
U1 and U1MJ	1.0MHz to 1.2MHz (SL-Cut)		
	4.0MHz to 200MHz (AT-Cut)		
U5 and U5MJ	10MHz to 200MHz (AT-Cut)		
Oscillation Mode:	See table		
Calibration Tolerance at 25°C			
SL-Cut (<1.3MHz):	from ±50ppm		
AT-Cut (>4.0MHz):	from ±3ppm		
Frequency Tolerance			
SL-Cut:	from ± 100 ppm -10° to $+60^{\circ}$ C		
AT-Cut:	from ±3ppm 0° to +50°C		
Shunt Capacitance (C0):	4pF typical, 7pF maximum		
Load Capacitance (CL):	Series or from 8pF to 32pF		
	(Customer specified CL)		
Ageing:	±3ppm maximum, 1st year,		
	±1ppm per year thereafter.		
Drive Level:	100μWatts typ., 500μWatts max.		
Crystal Holder:	Resistance-weld hermetic seal		
Supply format:	Bulk pack		
RoHS Status:	RoHS Compliant and pB free		

FREQUENCY, OSCILLATION MODE, ESR

U1, U1SL and U1MJ

Frequency Range MHz	Crystal Cut/ Oscill. Mode	ESR Ω Max.
1.0 ~1.2	SL Fund.	5k
6.0 ~ 6.9	AT Fund.	100
7.0 ~ 7.9	AT Fund.	90
8.0 ~ 8.9	AT Fund.	80
9.0 ~ 10.9	AT Fund.	60
11.0 ~ 12.9	AT Fund.	40
13.0 ~ 45.0	AT Fund.	25
$30.0 \sim 50.0$	AT 3rd o.t.	40
50.1 ~ 100.0	AT 3rd o.t.	50
80.0 ~ 200.0	AT 5th o.t	80

U5 and U5MJ

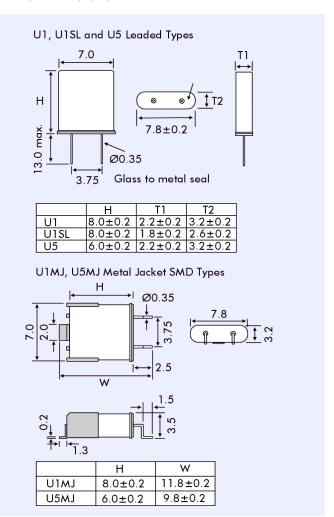
Frequency Range MHz	Crystal Cut/ Oscill. Mode	$\begin{array}{c} \textbf{ESR} \\ \Omega \ \textbf{Max.} \end{array}$
10.0 ~ 11.9	AT Fund.	60
12.0 ~ 14.9	AT Fund.	50
15.0 ~ 35.0	AT Fund.	30
35.1 ~ 90.0	AT 3rd o.t.	60
90.0 ~ 135.0	AT 3rd o.t	40
90.0 ~ 159.0	AT 5th o.t.	100
160.0 ~ 200.0	AT 5th o.t.	80







OUTLINE & DIMENSIONS



PART NUMBER FORMAT

