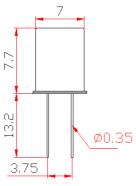
# XH(UM-1) Type FEATURE

- 7.3 x 2.6 x 7.8 mm UM-1 Resistance Weld
- Gold electrode, vacuum
- Fast warm up
- High stability, low temperature frequency coefficient
- Good aging and reliability

### **TYPICAL APPLICATION**

- Precision OCXO, VCXO and TCXO oscillators

### **DIMENSION (mm)**



## EQUIVALENT SERIES RESISTANCE (E.S.R)

Frequency Range	MODE(Cut)	E.S.R.
8 MHz≦Fo≦10 MHz	AT Fundamental	≦40Ω
10 MHz <fo≦20 mhz<="" th=""><th>AT Fundamental</th><th>≦35Ω</th></fo≦20>	AT Fundamental	≦35Ω
20 MHz <fo≦40 mhz<="" th=""><th>AT 3<sup>rd</sup> OT</th><th>≦30Ω</th></fo≦40>	AT 3 <sup>rd</sup> OT	≦30Ω
40 MHz <fo≦80 mhz<="" th=""><th>AT 3<sup>rd</sup> OT</th><th>≦<b>30Ω</b></th></fo≦80>	AT 3 <sup>rd</sup> OT	≦ <b>30Ω</b>
5 MHz≦Fo≦10 MHz	SC Fundamental	≦50Ω
10 MHz <fo≦20 mhz<="" th=""><th>SC Fundamental</th><th>≦40Ω</th></fo≦20>	SC Fundamental	≦40Ω
20 MHz <fo≦40 mhz<="" th=""><th>SC 3<sup>rd</sup> OT</th><th><math>\leq</math> 100<math>\Omega</math></th></fo≦40>	SC 3 <sup>rd</sup> OT	$\leq$ 100 $\Omega$

# **ELECTRICAL SPECIFICATION**

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Parameter	Min.	Typical	Max.	Unit
Operating Temp. Range	-55		+125	°C
Standard Frequency	20	MHz		
Turn Point	+75°C to +105°C (mode, cut, frequency dependent, other turn points			°C
Frequency Tolerance @ Turn	±3	±5	±10	ppm
Level of Drive		100	500	μW
Shunt Capacitance (C0)			7.0	pF
Insulation Resistance	500MΩ @ DC100V			
Aging		±0.5 to ±1.0		ppm/year

Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.

### **STANDARD OPTIONS**

Nominal Frequency	MODE(Cut)	R(Ω)	C0(pF)	C1(fF)	Q(Typical)	Aging(ppm/year)
20 MHz	AT 3 <sup>rd</sup> OT	<35	<3.0	0.93 ± 20%	380k	0.5
24 MHz	AT 3 <sup>rd</sup> OT	<30	<3.0	1.07 ± 20%	350k	0.5
26 MHz	AT 3 <sup>rd</sup> OT	<30	<3.0	1.16 ± 20%	270k	0.5
38.88 MHz	AT 3 <sup>rd</sup> OT	<30	<4.0	1.54 ± 20%	220k	0.5
20 MHz	SC 3 <sup>rd</sup> OT	<100	<3.0	0.16 ± 20%	600k	0.1
25.6 MHz	SC 3 <sup>rd</sup> OT	<60	<3.2	0.35 ± 20%	400k	0.1
40 MHz	SC 3 <sup>rd</sup> OT	<60	<4.5	0.36 ± 20%	300k	0.2

Note: not all combination of options are available. Other specifications may be available upon request.

Specifications subject to change without notice

Rev(1)02/2015 www.taitien.com sales@taitien.com.tw

