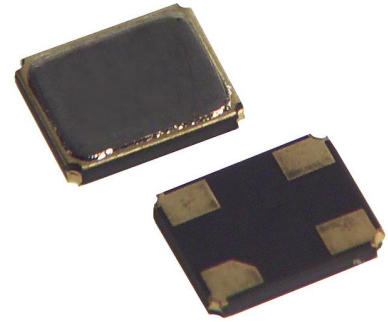


FEATURE

- Ultra-thin, thickness 0.7mm
- Leadless type
- High precision characteristic covering up to high frequency range
- Designed for automatic mounting and reflow soldering
- Emboss taping specification
- The best choice of Bluetooth wireless communication sets, DSN, PDA and mobile phone.

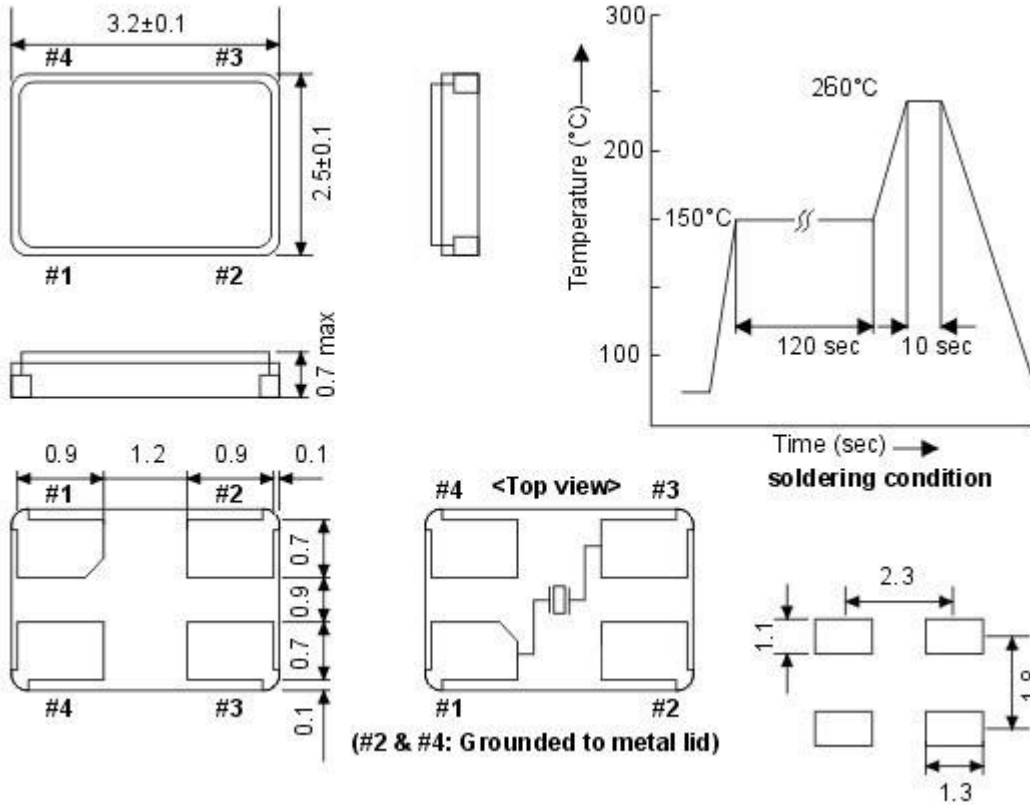


ELECTRICAL SPECIFICATIONS

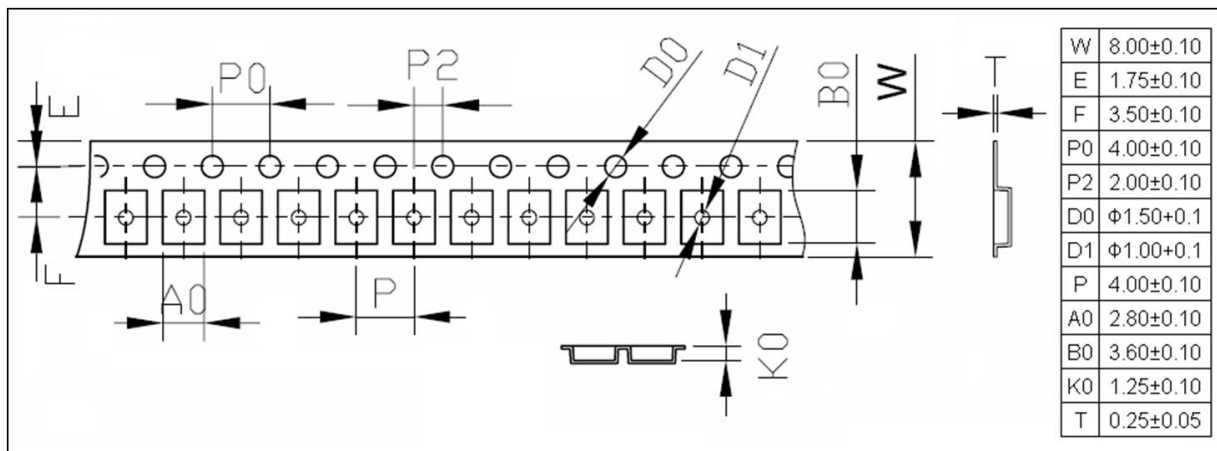
Output Frequency Range	10.000MHz
Mode	Fundamental
Frequency Tolerance (at 25°C)	±30ppm
Frequency Stability Over Operating Temperature Characteristics	±30ppm
Operating Temperature Range	-20°C to +70 °C
Storage Temperature Range	-55°C to +125 °C
Shunt Capacitance (C ₀)	5.0pF Max
Driver Level (Typical)	10μW~100μW
Load Capacitance(C _L)	12pF
EQUIVALENT SERIES RESISTANCE (ESR)	200ohm
Aging @25°C 1 st year (Max)	±3ppm/year
Shock Resistance	Drop test of 3 times on 2mm stainless plate from 75cm height

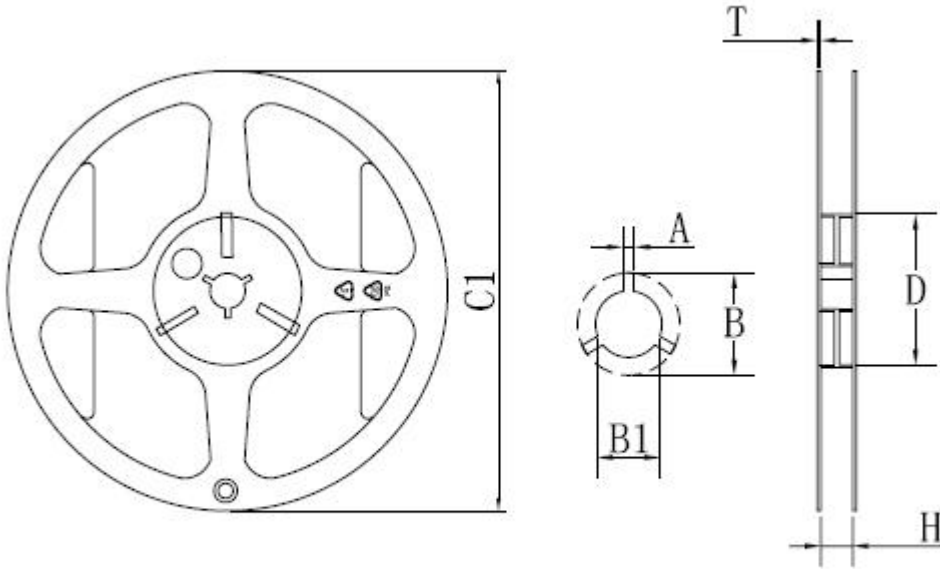
REMARK: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. PLEASE CONFIRM WITH OUR SALES ENGINEER.

DIMENSION Unit: mm



TAPE & REEL



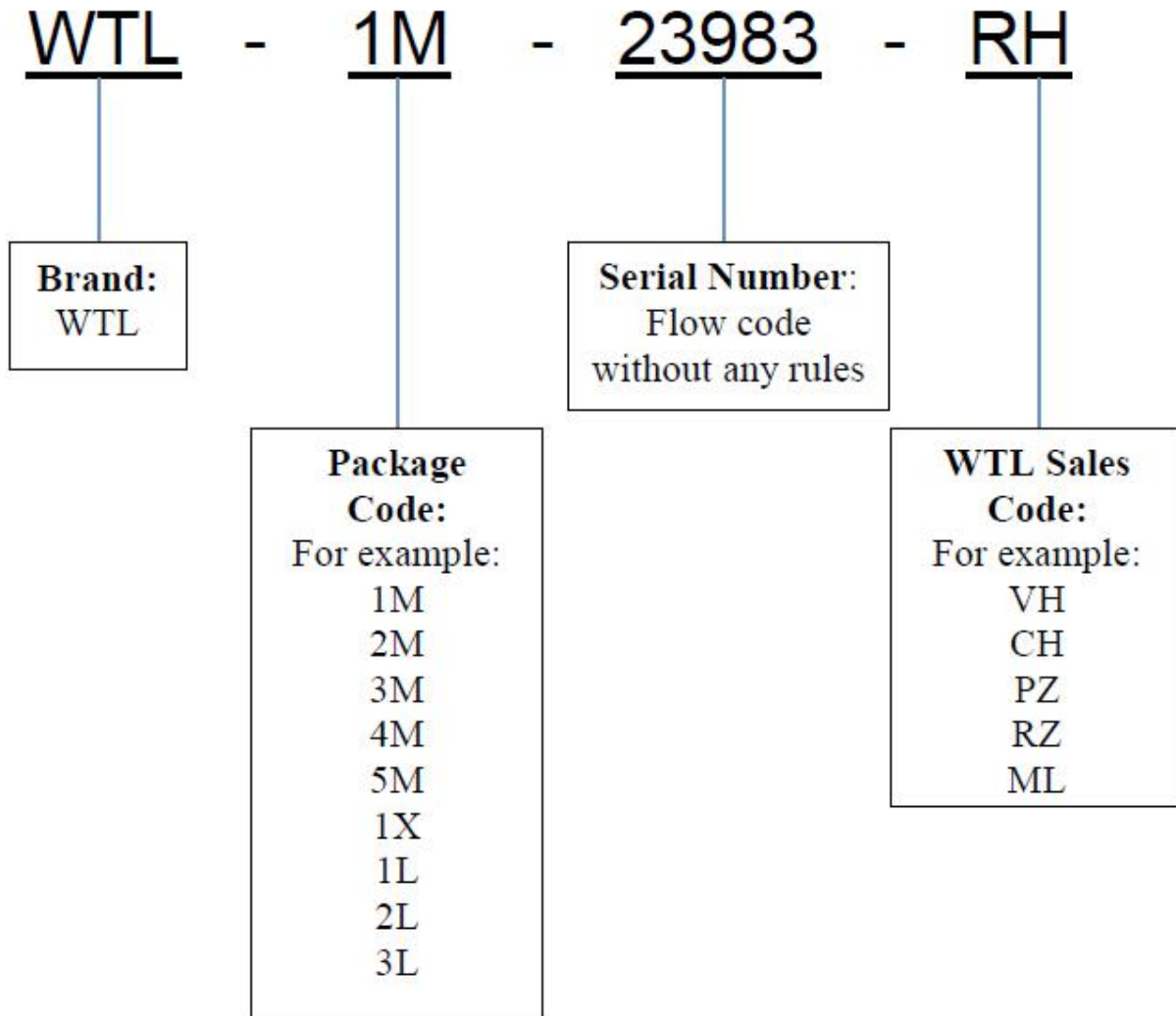


$C1 \pm 1$	$A \pm 0.3$	$B \pm 0.3$	$B1 \pm 0.3$	$T \pm 0.2$	$D \pm 0.5$	$H_{\pm 0.5}^{0.5}$
178	2.5	21.0	13.2	1.0	60.5	8.5

WTL Part Number System:

For example: WTL1M23983RH

[Instructions: for project management, WTL will trace back the part number to developer wherever it goes]



Marking Instruction:

[The date code was marked on the crystal body, which will be easily traced back in case of quality issue.]

Quartz Crystal			Watch crystal			Crystal oscillator		
Series	Package Dimension	Marking style	Series	Package Dimension	Marking style	Series	Package Dimension	Marking style
TX1	2.0*1.6mm 4pads	WTL A2 12.000	WX1	3.2*1.5mm 2pads	W32A2	LO2	2.5*2.0mm	WTL A2 .12.000
TX2	2.5*2.0mm 4pads		WX2	2*6mm,3*8mm		LO3	3.2*2.5mm	
TX3	3.2*2.5mm 4pads	Instructions: WTL= WTL brand A= Week code * 2= Year code * 12.000=first 6 codes of frequency	WX3	3.8*8.0mm SMD	Instructions: W=WTL brand 32= first 2 codes of frequency A= week code * 2= year code *	LO5	5.0*3.2mm	Instructions: W=WTL brand A= Week code * 2= Year code * . = oscillator code 12.000=first 6 codes of frequency
TX4	4.0*2.5mm 4pads		WX4	6.9*1.4mm SMD		LO7	7.0*5.0mm	
TX5	5.0*3.2mm 4pads		WX8	2*6mm SMD		LO1	Full/half size	
TX6	6.0*3.5mm 4pads					LV7	7.0*5.0mm VCXO	
TX7	7.0*5.0mm 4pads					LV1	Full/half size VCXO	
TG8	8.0*4.5mm 2pads GLASS					WT1	TCXO	
TG7	7.0*5.0mm 2pads GLASS							
TG6	6.0*3.5mm 2pads GLASS							
TG5	5.0*3.2mm 2pads							
TS7	7.0*5.0mm 2pads							
TS6	6.0*3.5mm 2pads							
TS5	5.0*3.2mm 2pads							
WX5	HC49/U							
WX6	HC49/S							
WX7	HC49/SMD							
WF1	MCF							

* Week code + year code , please refer to WTL Date Code Instructions.

Version 1
2009-1-1