



### Features and Benefits

Typical 10.8x4.5x3.4mm standard footprint  
Low profile for close PCB stacking

### Typical Applications

Bluetooth, Wireless LAN  
Automotive  
Computers, Modems, Communications  
Set-top Box, DECT/WDCT

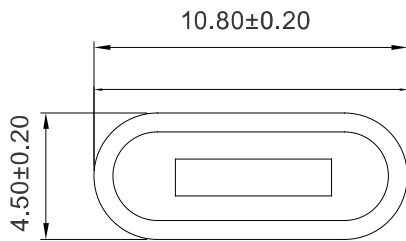
### Description

Xtal1145S\_series offers Tight tolerance and 10.8x4.5x3.4mm standard footprint. This device is suitable for use under various telecom and network communication applications

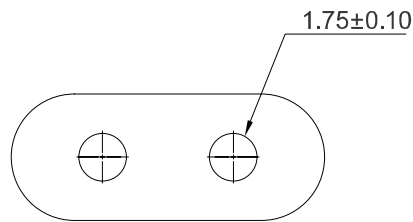
### Mechanical Drawing & Pin Connections

Drawing No: MD180003-1

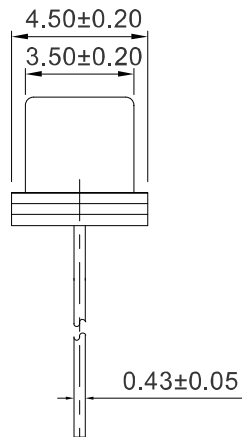
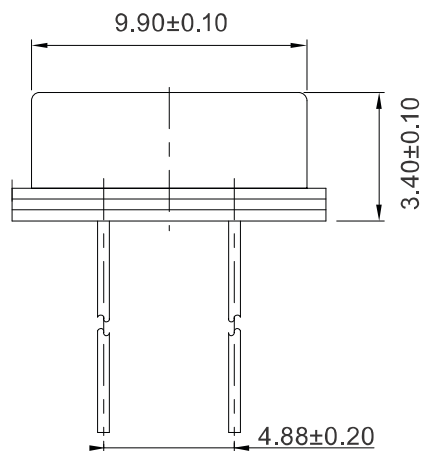
[ TOP VIEW ]



[ BOTTOM VIEW ]



[ SIDE VIEW ]



Unit in mm  
1mm = 0.0394 inches



**Specifications**

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Storage temperature			-55		125	°C	
Level of drive				10	800	uW	
Shunt capacitance	C0				7.0	pF	
Insulation resistance			500Mohm@DC 100V				
Equivalent Series Resistance(ESR)		$F_0 \leq 3.58\text{MHz}$			140	ohm	
		$4\text{MHz} < F_0 < 5\text{MHz}$			120		
		$5\text{MHz} \leq F_0 < 7\text{MHz}$			80		
		$7\text{MHz} \leq F_0 < 9\text{MHz}$			45		
		$9\text{MHz} \leq F_0 < 13\text{MHz}$			40		
		$13\text{MHz} \leq F_0 < 16\text{MHz}$			35		
		$16\text{MHz} \leq F_0 < 20\text{MHz}$			30		
		$20\text{MHz} \leq F_0 < 30\text{MHz}$			25		
		$30\text{MHz} \leq F_0 < 36\text{MHz}$			25		
		$36\text{MHz} \leq F_0 \leq 80\text{MHz}$			80		
Aging			±5.0			ppm/year	

**Ordering Options Availability**

Frequency Stability [ppm]	Operating Temperature Range [°C]		
	-10 ~ +60	-20 ~ +70	-40 ~ +85
±5	Not Available	Not Available	Not Available
±10	Available	Conditional	Not Available
±15	Available	Available	Not Available
±20	Available	Available	Available

Frequency Stability [ppm]	Load Capacitance [pF]				
	8	10	12	16	Series
±5	Not Available	Not Available	Not Available	Not Available	Conditional
±10	Not Available	Not Available	Conditional	Conditional	Available
±15	Conditional	Conditional	Available	Available	Available
±20	Available	Available	Available	Available	Available
±30	Available	Available	Available	Available	Available

Not all combinations of temperature range and stability are available. Please consult DEI for details.