



**Data Sheet**



Product Category: Quartz Crystals

Series Number	Package	Description	Last Modified
171, 174, 175	3x8, 3x9, 3x10	High Frequency Quartz	July. 01 2005

**Quartz Crystal FEATURES**

- Wide Frequency Range
- Industry standard package
- Excellent aging/reliability
- Cost effective
- RoHs / Lead Free compliant



**OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS**

PARAMETERS		CHARACTERISTICS	CONDITIONS
Size (Figure No.)	-	All	-
Frequency Range	$f_O$	3.579 ~ 60.0	MHz
Frequency Tolerance	$F_L$	±10 ~ 50	PPM
Temperature Tolerance	$T_L$	±5 std.	PPM
Operating Temperature	$T_{OPR}$	-10 ~ +60	°C
Storage Temperature	$T_{STG}$	-55 ~ +125	°C
Operation Mode	-	See Table	-
Load Capacitance	$C_L$	10.0 std. Series available	pF
Shunt Capacitance	$C_0$	7.0 max.	pF
Drive Level	$D_L$	0.01 ~ 1.0	mW
Insulation Resistance	$I_R$	500 min. (100DC)	Mohm
Aging (First Year)	+25°C	+ / -5 max.	PPM/Y
Motional Resistance	$R_S$	See Table	ohm

**OPERATION MODE AND RS**

FREQUENCY RANGE (MHz)	MODE	RS (ohm max.)	FREQUENCY RANGE (MHz)	MODE	RS (ohm max.)
3.579 ~ 3.699	Fundamental	200	10.000 ~ 11.999	Fundamental	70
3.700 ~ 3.999	Fundamental	180	12.000 ~ 13.999	Fundamental	60
4.000 ~ 4.099	Fundamental	150	14.000 ~ 15.999	Fundamental	50
4.100 ~ 4.999	Fundamental	120	16.000 ~ 30.000	Fundamental	40
5.000 ~ 5.999	Fundamental	100	27.000 ~ 60.000	3rd O/T	100
7.000 ~ 9.999	Fundamental	80			

## PACKAGE DIMENSIONS (mm)

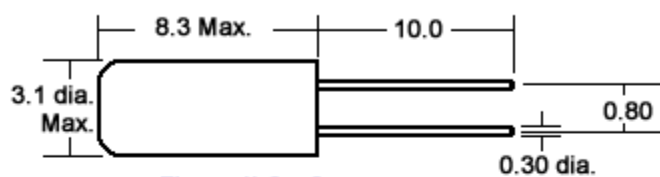


Figure 1) 3 x 8

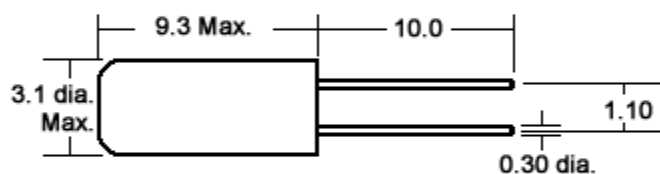


Figure 2) 3 x 9

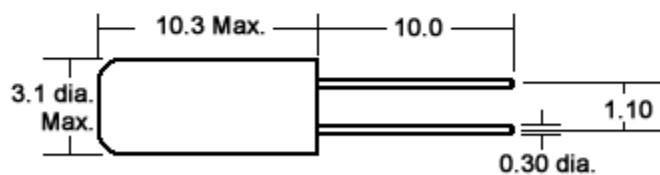


Figure 3) 3 x 10

## PART NUMBER GUIDE

Series Number	Frequency	Load Capacitance	Tolerance @ +25C	Tolerance Over Temp ( oC )	Operating Temp ( oC )	Packaging**
174	- 60.0M	- 10	- 05	K	S	- TR
171 = 3x8 (Fig. 1)	Enter your required frequency. e.g. 2.048M = 2.048 MHz	10 = 10pF SR = Series Resonance *** Others Avail.	Blank *= ±30PPM or Fill in E.G 05 = ±5 PPM 25 = ±25 PPM Avail. = ±5 ~ ±100	Blank*= ±50 PPM G = ±30 PPM H= ±20 PPM K = ±15 PPM L = ±10 PPM M= ±5 PPM	P = 0~+50 R = -10~+60 S = -20~+70 T = -30~+80 W = -40~+85	Blank* = Bulk -TR = Tape/ Reel
174 = 3x9 (Fig. 2)						
175 = 3x10 (Fig. 3)						
<p><b>NOTE:</b> Deviations on all parameters available. Please consult Oscilent for details.</p> <p><b>DEFINITIONS:</b> Click on the characteristic names above, for definitions of that particular characteristic.</p> <p><b>*STANDARDS:</b> "Blank" part number selections indicate standard variables for that particular characteristic.</p> <p><b>**PACKAGING:</b> Click on the packaging name above for tape/reel specifications.</p> <p><b>***LOAD CAP.:</b> 10.0pF standard. Other load capacitance available, please specify.</p>						

Oscilent Corporation - CALL 949.252.0522

Series No.: 171, 174, 175

18195 East McDermott Street . Building D . Irvine . CA 92614 . USA  
Fax: 949.252.0599 . E-Mail: Sales@Oscilent.com