



Data Sheet

telephone
949 252 0522
BACK

Product Category: SMD Quartz Crystal

Series Number	Package	Description	Last Modified
290	6 X 3.5	SMD Quartz Crystal	Jun. 25 2003

FEATURES

- Seam welded metal lid / ceramic package
- 1.2mm max. low profile
- Tight stability / High reliability
- Wide frequency range
- Tape and Reel

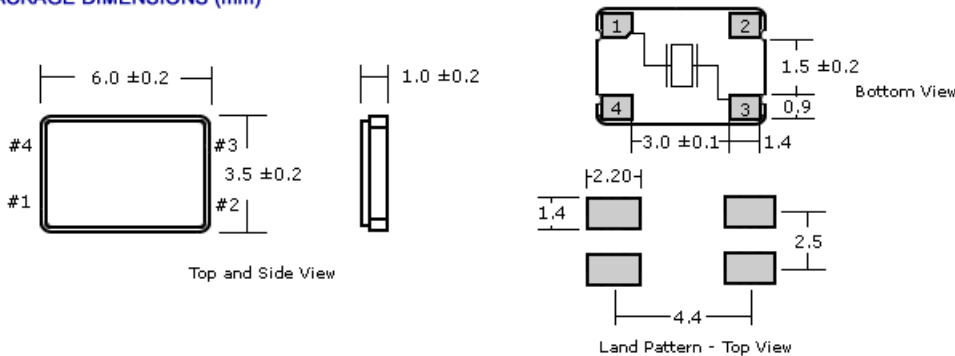


OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS		CHARACTERISTICS	UNITS
Frequency Range	f ₀	10.00 ~ 40.00	MHz
Frequency Tolerance	@ 25°C	±10 ~ ±50	PPM
Frequency Stability	T _a = -10 +70°C	±10 ~ ±100	PPM
Operating Temperature	T _{OPR}	-10 ~ +60 (-40 ~ +85 optional)*	°C
Storage Temperature	T _{STG}	-40 ~ +85	°C
Shunt Capacitance	C ₀	7.0 max.	pF
Load Capacitance	C _L (Customer Specified)	16, 20, 30, Series	pF
Equivalent Series Resistance	10.00 ~ 40.00 MHz	50 max.	Ohm
Mode of Oscillation	10.00 ~ 40.00 MHz	Fundamental	-
Drive Level	10.00 ~ 40.00 MHz	0.01 ~ 1000	µW

* Consult Oscilent for available variations of temperature and stability

PACKAGE DIMENSIONS (mm)



PART NUMBER GUIDE

Series Number	Frequency	Load Capacitance	Tolerance @ +25oC	Tolerance Over Temp (oC)	Operating Temp (oC)	Packaging**
290	- 12.0M	- SR	- 05	G	R	- TR
Oscilent 6 x 3.5 SMD	See table below for standard freq. and enter here e.g. 12.0M for 12.000 MHz OR enter any desire frequency.	Enter desired capacitance here. See table below for standard load capacitance e.g. -20 for 20pF or Enter SR for Series.	Blank * = ±30 PPM or Fill in E.G 05 = ±5 PPM 25 = ±25 PPM Avail. = ±5 ~ ±100	Blank* = ±50 PPM G = ±30 PPM J = ±25 PPM H = ±20 PPM L = ±10 PPM N = ±100 PPM	P = 0~+50 R = -10~+60 S = -20~+70 T = -30~+80 W = -40~+85	Blank* = Bulk TR = Tape/Reel

NOTE: Deviations on all parameters available. Please consult Oscilent for details.

DEFINITIONS: Click on the characteristic names above for definitions of that particular characteristic.

***STANDARDS:** "Blank" part number selections indicate standard variables for that particular characteristic.

****PACKAGING:** Click on the packaging name above for tape/reel specifications

STANDARD FREQUENCIES / LOAD CAPACITANCE - FOR GUIDE ONLY / OTHER FREQ/LOADS

AVAILABLE

FREQUENCY (MHz)	LOAD (pF)							
	Series	12	13	16	17	18	20	30
12.000	Std.	-	-	-	-	-	-	-
14.31818	Std.	-	-	-	-	-	Std.	-
16.000	Std.	-	-	-	-	-	-	-
18.432	Std.	-	-	-	-	-	-	-
19.6608	Std.	-	-	-	-	-	-	-

20.000	Std.	-	-	-	-	-	Std.	-
24.000(F)	Std.	-	-	-	-	-	Std.	-
24.00014 (F)	Std.	-	-	-	-	-	-	-
30.000 (F)	Std.	-	-	-	-	-	-	-
30.000 (OT)	Std.	-	-	-	-	-	-	-
32.000 (F)	Std.	-	-	-	-	-	-	-
32.000 (OT)	Std.	-	-	-	-	-	-	-
33.000 (OT)	Std.	-	-	-	-	-	-	-
33.8688 (F)	-	-	-	-	-	-	-	-
35.2512(OT)	Std.	-	-	-	-	-	-	-
36.000 (F)	Std.	-	-	-	-	-	-	-
36.000 (OT)	Std.	-	-	-	-	-	-	-
40.000 (F)	Std.	-	-	-	-	-	-	-
40.00 (OT)	Std.	-	-	-	-	-	-	-
40.32 (F)	Std.	-	-	-	-	-	-	-
40.32 (OT)	Std.	-	-	-	-	-	-	-
FREQUENCY (MHz)	Series	12	13	16	17	18	20	30
	LOAD (pF)							
F = Fundamental OT = 3RD OT								
NOTE: Other frequencies and load capacitance available. Please consult Oscilent for part numbers.								

Oscilent Corporation - CALL **1.949.252.0522**

Series No.: 290

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