



Quartz Crystals



The XT23 is a miniature SMD crystal with 3.2 x 2.5 (mm) ceramic package and a height of 0.8 mm. 12 MHz to 25 MHz frequncy makes it widely applied in PDA, GPS, MP3, PCMCIA, bluetooth, and portable instruments.

FEATURES

• Ultra-miniature size: 3.2 x 2.5 x 0.8 (mm)



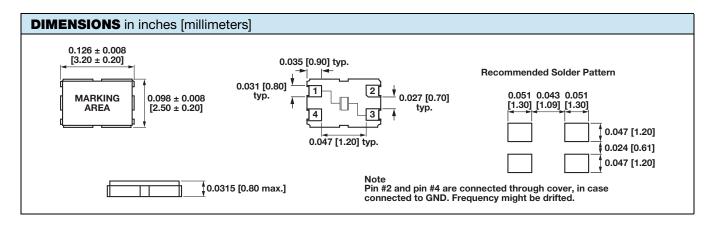
- · Seam sealing
- · Emboss taping
- Compliant to RoHS Directive 2002/95/EC



ROHS

STANDARD ELECTRIC	CAL SPECIFIC	CATIONS				
PARAMETER	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.
Frequency range	F _O		MHz	12.000	-	25.000
Frequency tolerance	ΔF/F _O	at 25 °C	ppm	-	± 30	-
Temperature stability	T _C	ref. to 25 °C	ppm	-	± 50	-
Operating temperature range	T _{OPR}		°C	0	-	+ 70
Storage temperature range	T _{STG}		°C	- 55	-	+ 125
Shunt capacitance	C ₀		pF	-	-	3
Load capacitance	C _L	customer specified	pF	10	-	series
Insulation resistance	I _R	100 V _{DC}	MΩ	500	-	-
Drive level	D_L		μW	10	100	300
Aging	Fa	at 25 °C, per year	ppm	- 5	-	+ 5

EQUIVALENT SERIES RESISTANCE (ESR) AF	ND MODE OF VIBRATION (M	MODE)
FREQUENCY RANGE (MHz)	MAX. ESR (Ω)	MODE
12.000 to 12.999	100	fundamental
13.000 to 19.999	80	fundamental
20.000 to 25.000	70	fundamental



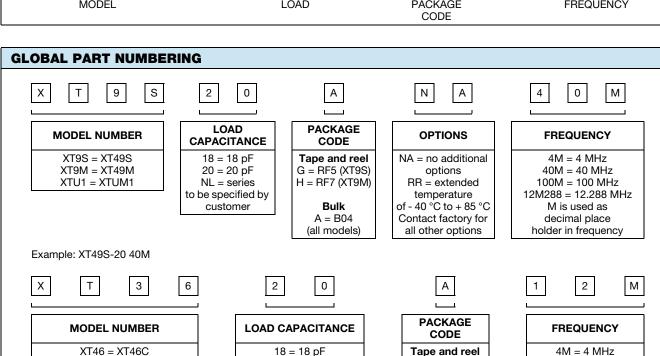
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ORDERING INFORMATIO	N		
XT23	-20	25M	e4
MODEL	LOAD blank = series -20 = 20 pF -32 = 32 pF -16 = 16 pF	FREQUENCY/MHz	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER			
X T 2 3	2 0 LOAD	A PACKAGE CODE	2 5 M FREQUENCY



COI	LOAD CAPACITANCE	MODEL NUMBER
Tape ar	18 = 18 pF	XT46 = XT46C
H = F	20 = 20 pF	XT36 = XT36C
	NL = series	XT35 = XT35
Bu	to be specified by	XT23 = XT23
A = E	customer	

H = RF7 **Bulk**A = B04
(all models)

FREQUENCY

4M = 4 MHz
40M = 40 MHz
100M = 100 MHz
12M288 = 12.288 MHz
M is used as
decimal place
holder in frequency

Example: XT36C-20 12M





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