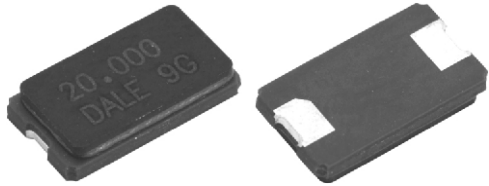


Surface Mount Crystal



FEATURES

- Miniature size: 8.0 x 4.5 x 1.8 (mm)
- Wide frequency range
- Glass sealing
- Emboss tapping
- Compliant to RoHS directive 2002/95/EC


RoHS
COMPLIANT

The XT36C part is a miniature SMD crystal with 8.0 x 4.5 ceramic package and a height of 1.8 mm maximum. It is widely applied in notebook computer, PCMCIA, and communication equipment.

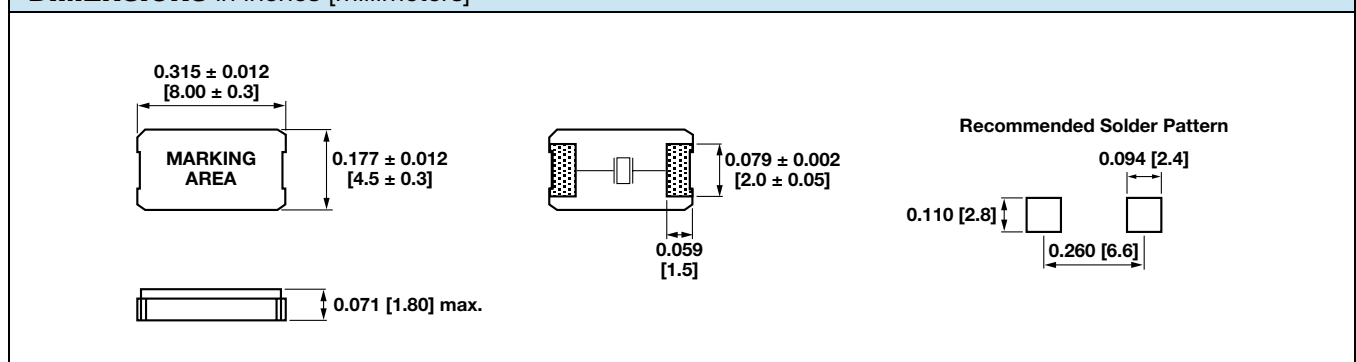
STANDARD ELECTRICAL SPECIFICATIONS

PARAMETER	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.
Frequency range	F_0		MHz	10.000	-	70.000
Frequency tolerance	$\Delta F/F_0$	at 25 °C	ppm	-	± 50	-
Temperature stability	T_C	ref. to 25 °C	ppm	-	± 50	-
Operating temperature range	T_{OPR}		°C	- 10	-	+ 60
Storage temperature range	T_{STG}		°C	- 55	-	+ 125
Shunt capacitance	C_0		pF	-	-	7
Load capacitance	C_L	customer specified	pF	10	-	series
Insulation resistance	I_R	100 V _{DC}	M Ω	500	-	-
Drive level	D_L		μ W	-	10	500
Aging	F_a	at 25 °C, per year	ppm	- 5	-	+ 5

EQUIVALENT SERIES RESISTANCE (ESR) AND MODE OF VIBRATION (MODE)

FREQUENCY RANGE (MHz)	MAX. ESR (Ω)	MODE	FREQUENCY RANGE (MHz)	MAX. ESR (Ω)	MODE
10.000 to 10.999	110	fundamental	20.000 to 31.999	25	fundamental
11.000 to 14.099	50	fundamental	32.000 to 47.999	110	3 rd overtone
14.100 to 17.999	45	fundamental	48.000 to 70.000	100	3 rd overtone
18.000 to 19.999	30	fundamental			

DIMENSIONS in inches [millimeters]





ORDERING INFORMATION			
XT36C MODEL	-20 LOAD blank = series -12 = 12 pF -16 = 16 pF -20 = 20 pF -32 = 32 pF	24M FREQUENCY/MHz	e4 JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER			
X T 3 6	2 0	A	2 4 M
MODEL	LOAD	PACKAGE CODE	FREQUENCY

GLOBAL PART NUMBERING				
X T 9 S	2 0	A	N A	4 0 M
MODEL NUMBER	LOAD CAPACITANCE	PACKAGE CODE	OPTIONS	FREQUENCY
XT9S = XT49S XT9M = XT49M XTU1 = XTUM1	18 = 18 pF 20 = 20 pF NL = series to be specified by customer	Tape and reel G = RF5 (XT9S) H = RF7 (XT9M) Bulk A = B04 (all models)	NA = no additional options RR = extended temperature of - 40 °C to + 85 °C Contact factory for all other options	4M = 4 MHz 40M = 40 MHz 100M = 100 MHz 12M288 = 12.288 MHz M is used as decimal place holder in frequency
Example: XT49S-20 40M				
X T 3 6	2 0	A	1 2 M	
MODEL NUMBER	LOAD CAPACITANCE	PACKAGE CODE	FREQUENCY	
XT46 = XT46C XT36 = XT36C	18 = 18 pF 20 = 20 pF NL = series to be specified by customer	Tape and reel H = RF7 Bulk A = B04 (all models)	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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