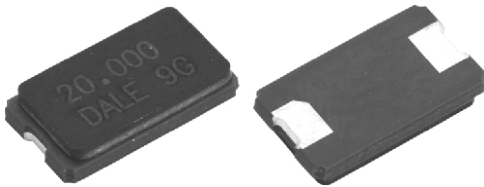


## Surface Mount Crystal



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

### FEATURES

- Miniature size: 8.0 x 4.5 x 1.8 (mm)
- Wide frequency range
- Glass sealing
- Emboss tapping
- Material categorization: For definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**RoHS**  
COMPLIANT

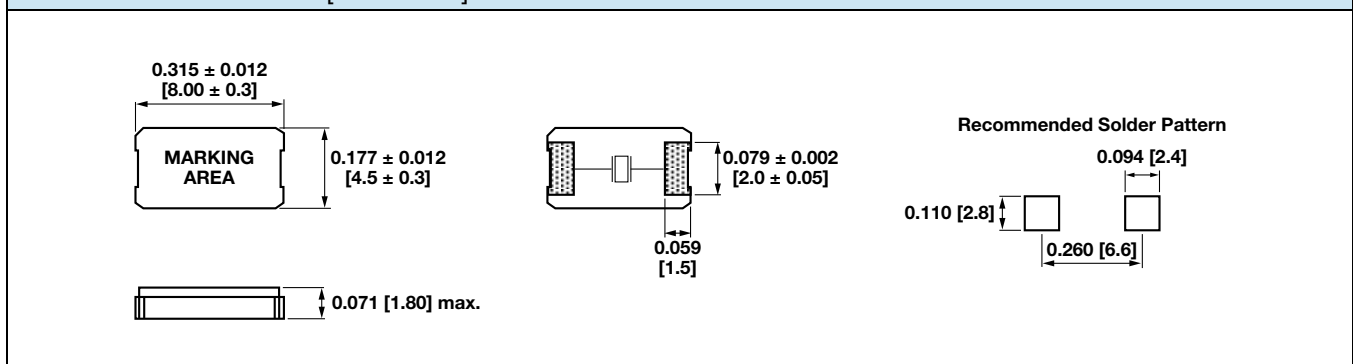
### STANDARD ELECTRICAL SPECIFICATIONS

PARAMETER	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.
Frequency range	F <sub>O</sub>		MHz	10.000	-	70.000
Frequency tolerance	ΔF/F <sub>O</sub>	at 25 °C	ppm	-	± 50	-
Temperature stability	T <sub>C</sub>	ref. to 25 °C	ppm	-	± 50	-
Operating temperature range	T <sub>OPR</sub>		°C	- 10	-	+ 60
Storage temperature range	T <sub>STG</sub>		°C	- 55	-	+ 125
Shunt capacitance	C <sub>0</sub>		pF	-	-	7
Load capacitance	C <sub>L</sub>	customer specified	pF	10	-	series
Insulation resistance	I <sub>R</sub>	100 V <sub>DC</sub>	MΩ	500	-	-
Drive level	D <sub>L</sub>		μW	-	10	500
Aging	F <sub>a</sub>	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 <sup>rd</sup> overtone
14.100 to 17.999	45	fundamental	48.000 to 70.000	100	3 <sup>rd</sup> overtone
18.000 to 19.999	30	fundamental			

### DIMENSIONS in inches [millimeters]





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

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

GLOBAL PART NUMBERING				
X T 9 S MODEL NUMBER XT9S = XT49S XT9M = XT49M	2 0 LOAD CAPACITANCE 18 = 18 pF 20 = 20 pF NL = series to be specified by customer	A PACKAGE CODE Tape and reel G = RF5 (XT9S) H = RF7 (XT9M) Bulk A = B04 (all models)	NA OPTIONS NA = no additional options RR = extended temperature of -40 °C to +85 °C Contact factory for all other options	4 0 M FREQUENCY 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 MODEL NUMBER XT46 = XT46C XT36 = XT36C	2 0 LOAD CAPACITANCE 18 = 18 pF 20 = 20 pF NL = series to be specified by customer	H PACKAGE CODE Tape and reel H = RF7	1 2 M 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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**Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.**

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Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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## JONHON

«JONHON» (основан в 1970 г.)

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(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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