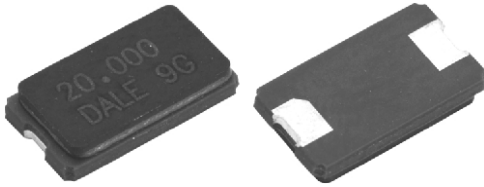


## Surface Mount Crystal



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

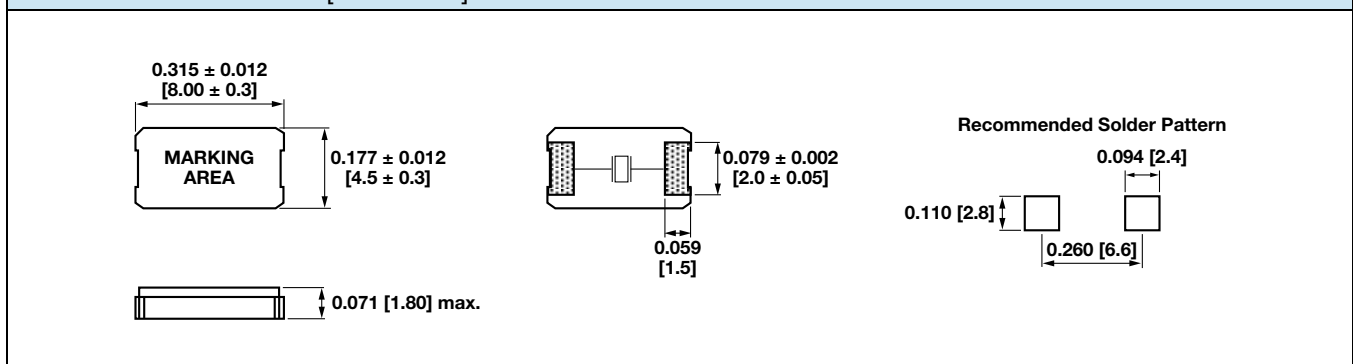
### STANDARD ELECTRICAL SPECIFICATIONS

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 <b>Tape and reel</b> G = RF5 (XT9S) H = RF7 (XT9M) <b>Bulk</b> 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 <b>Tape and reel</b> 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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## Material Category Policy

**Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.**

**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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С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

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- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
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- Входной контроль качества.
- Наличие сертификата ISO.

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Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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