

XT49M

Vishay Dale

Low Profile SMD Type Crystal Units



FEATURES

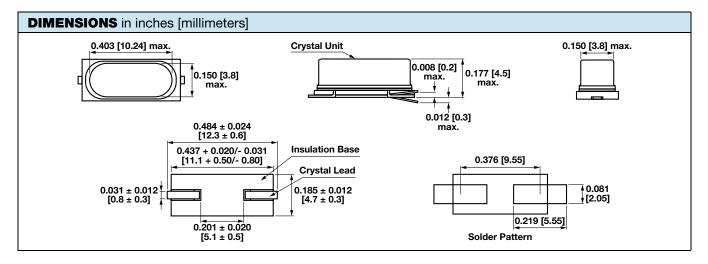
- Low cost
- Industry standard
- Wide frequency range
- Excellent aging
- Surface mount
- Compliant to RoHS directive 2002/95/EC



This part is a miniature AT cut strip crystal unit packaged for surface mounting.

STANDARD ELECTRICAL SPECIFICATIONS								
PARAMETER	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.		
Frequency range	Fo		MHz	3.579545	-	66.000		
Frequency tolerance	$\Delta F/F_{O}$	at 25 °C	ppm	- 30	-	+ 30		
Temperature stability	T _C	ref. to 25 °C	ppm	- 50	-	+ 50		
Operating temperature range	T _{OPR}		°C	- 10	-	+ 70		
Storage temperature range	T _{STG}		°C	- 55	-	+ 125		
Shunt capacitance	C ₀		pF	-	-	7		
Load capacitance	CL	customer specified	pF	10	-	series		
Insulation resistance	I _R	100 V _{DC}	MΩ	500	-	-		
Drive level	DL		μW	-	100	500		
Aging	Fa	at 25 °C, per year	ppm	- 5	-	+ 5		

EQUIVALENT SERIES RESISTANCE (ESR) AND MODE OF VIBRATION (MODE)									
FREQUENCY RANGE (MHz)	ΜΑΧ. ESR (Ω)	MODE	FREQUENCY RANGE (MHz)	ΜΑΧ. ESR (Ω)	MODE				
3.579 to 3.999	200	fundamental/AT	10.000 to 13.999	80	fundamental/AT				
4.000 to 4.999	150	fundamental/AT	14.000 to 39.999	50	fundamental/AT				
5.000 to 5.999	120	fundamental/AT	40.000 to 66.999	80	3 rd overtone				
6.000 to 9.999	100	fundamental/AT							

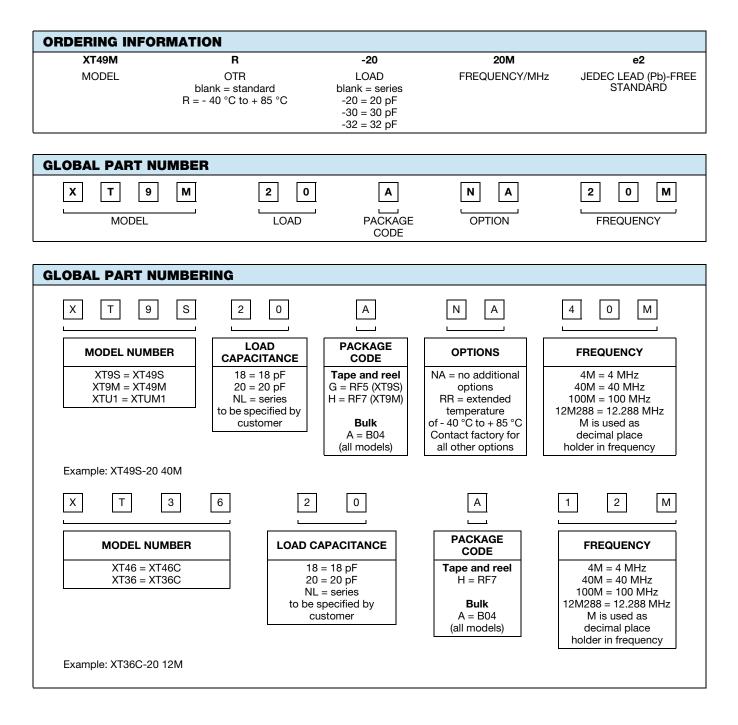


Document Number: 35012 Revision: 19-Mar-10

XT49M

Vishay Dale







Vishay

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk and agree to fully indemnify and hold Vishay and its distributors harmless from and against any and all claims, liabilities, expenses and damages arising or resulting in connection with such use or sale, including attorneys fees, even if such claim alleges that Vishay or its distributor was negligent regarding the design or manufacture of the part. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.