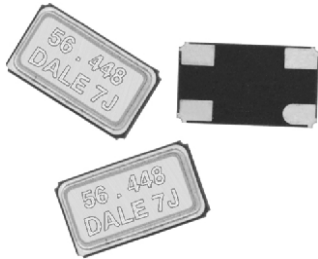


Surface Mount Crystal



FEATURES

- Ultra-miniature size: 6.0 x 3.5 x 1.0 (mm)
- Seam sealing
- Ceramic package
- Emboss taping
- Reflow soldering
- Compliant to RoHS directive 2002/95/EC


RoHS
COMPLIANT

This part is an ultra miniature package with size of 6.0 mm x 3.5 mm x 1.0 mm. With its ceramic base and metal cover it provides the durability and reliability necessary for strenuous process like infrared and vapor phase reflow.

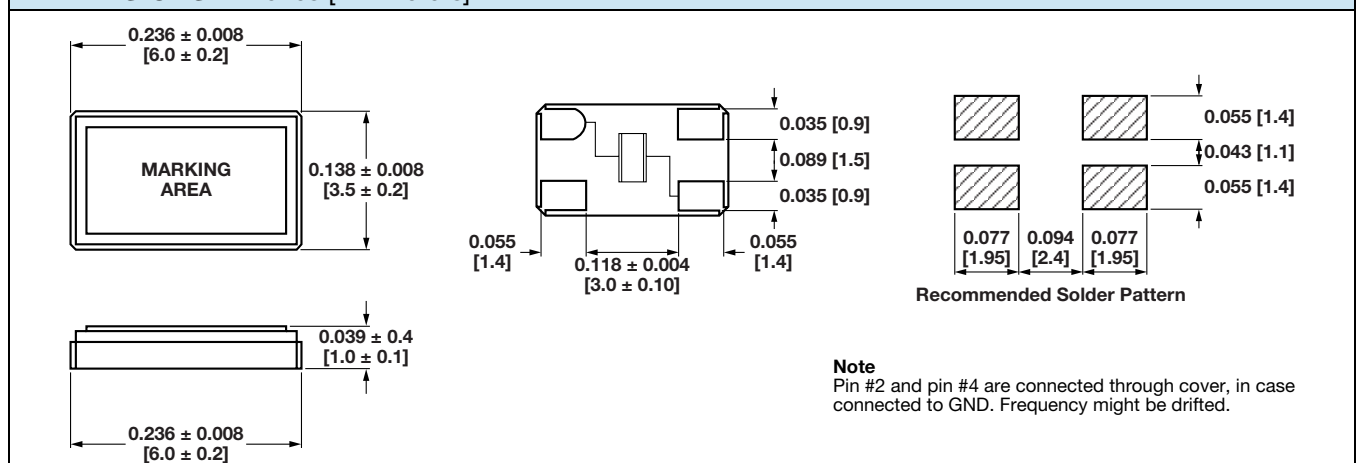
STANDARD ELECTRICAL SPECIFICATIONS

PARAMETER	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.
Frequency range	F_0		MHz	10.000	-	30.000
Frequency tolerance	$\Delta F/F_0$	at 25 °C	ppm	-	± 30	-
Temperature stability	T_C	ref. to 25 °C	ppm	-	± 30	-
Operating temperature range	T_{OPR}		°C	- 10	-	+ 60
Storage temperature range	T_{STG}		°C	- 40	-	+ 85
Shunt capacitance	C_0		pF	-	-	7
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
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 11.999	60	fundamental	19.000 to 19.999	40	fundamental
12.000 to 12.099	50	fundamental	20.000 to 29.999	35	fundamental
13.000 to 18.999	45	fundamental	30.000	30	fundamental

DIMENSIONS in inches [millimeters]





ORDERING INFORMATION			
XT46C	-20	25M	e4
MODEL	LOAD blank = series -20 = 20 pF standard -32 = 32 pF	FREQUENCY/MHz	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER			
X	T	4	6
MODEL			
2	0	A	2 5 M
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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