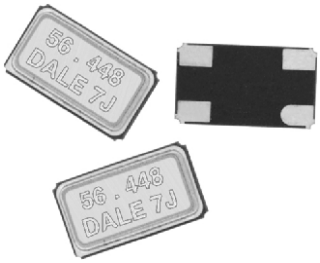
Surface Mount Crystal



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.

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

Pb-free
RoHS COMPLIANT

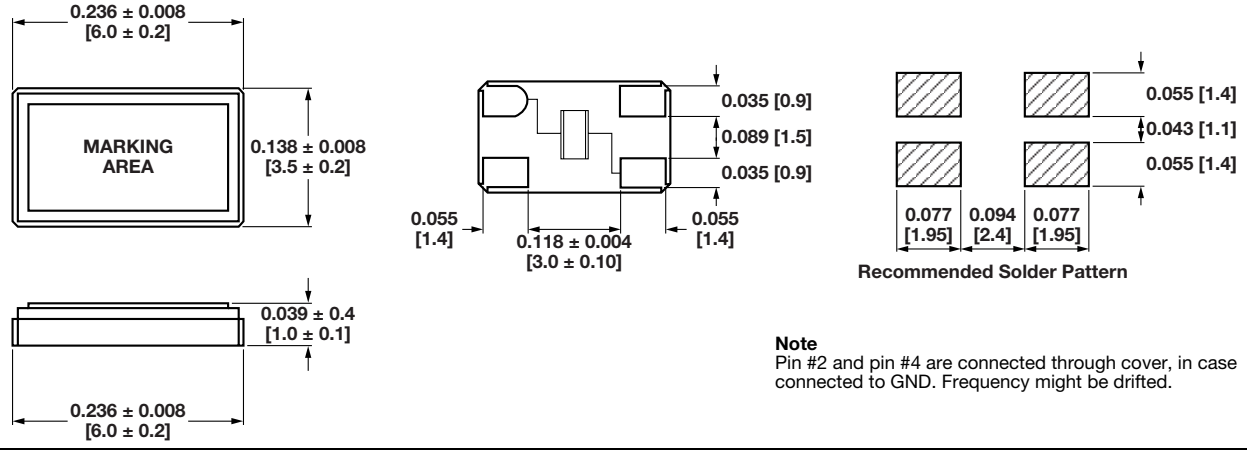
STANDARD ELECTRICAL SPECIFICATIONS

PARAMETER	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.
Frequency range	F_O		MHz	10.000	-	30.000
Frequency tolerance	$\Delta F/F_O$	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	Fa	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]



Note
Pin #2 and pin #4 are connected through cover, in case connected to GND. Frequency might be drifted.

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	2	0	A	2	5	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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