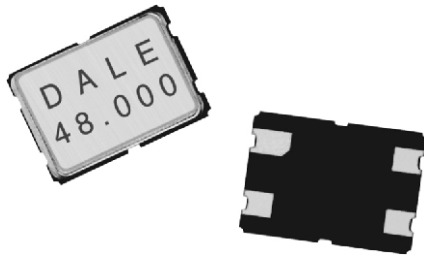


Quartz Crystals



FEATURES

- Miniature size: 7.0 x 5.0 x 1.1 (mm)
- Wide frequency range
- Seam sealing
- Emboss taping
- Compliant to RoHS directive 2002/95/EC


RoHS
COMPLIANT

The XT57C is a miniature SMD crystal with 7.0 x 5.0 ceramic package and a height of 1.1 mm maximum. 9.8304 MHz to 100 MHz frequency makes it widely applied in notebook computer, PCMCIA, and communication equipment.

STANDARD ELECTRICAL SPECIFICATIONS						
PARAMETER	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.
Frequency range	F_O		MHz	9.8304	-	100.000
Frequency tolerance	$\Delta F/F_O$	at 25 °C	ppm	± 10	± 30	± 50
Temperature stability	T_C	ref. to 25 °C	ppm	± 10	± 30	± 50
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}	$M\Omega$	500	-	-
Drive level	D_L		μW	-	100	300
Aging (first year)	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
9.8304 to 15.999	60	fundamental
16.000 to 39.999	40	fundamental
40.000 to 83.999	60	3 rd overtone
84.000 to 100.000	80	3 rd overtone

DIMENSIONS in inches [millimeters]	
	<p>Recommended Solder Pattern</p>
	<p>Note Pin #2 and pin #4 are connected through cover, in case connected to GND. Frequency might be drifted.</p>

ORDERING INFORMATION			
XT57C MODEL	-20 LOAD blank = series -20 = 20 pF -32 = 32 pF -16 = 16 pF	25M FREQUENCY/MHz	e4 JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER			
X T 5 7	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
XT9U = XT49U XT9S = XT49S XT9SL = XT49SL XT9M = XT49M XT9ML = XT49ML XTU1 = XTUM1	18 = 18 pF 20 = 20 pF NL = series to be specified by customer	Tape and reel G = RF5 (XT9U, XT9S, XT9SL) H = RF7 (XT9M, XT9ML) 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 2 6 T	T	A	3 2 K 7 6 8	
MODEL NUMBER	OPERATING TEMPERATURE (OTR)	PACKAGE CODE	FREQUENCY	
XT26T = XT26T XT38T = XT38T	T = -10 °C to +60 °C	Bulk A = B04 (all models)	32K768 = 32.768 kHz K is used as decimal place holder in frequency	
Example: XT26T 32.768K				
X T 5 7	2 0	A	4 0 M	
MODEL NUMBER	LOAD CAPACITANCE	PACKAGE CODE	FREQUENCY	
XT57 = XT57C 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: XT57C-20 40M				



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