Low Profile Holder Type Crystal Units

This part is a miniature AT cut strip crystal unit with a low profile package. It is with resistance weld.

FEATURES

- Low cost
- Industry standard
- Wide frequency range
- Excellent aging
- 100 % Lead (Pb)-free and RoHS compliant

Pb-free
RoHS

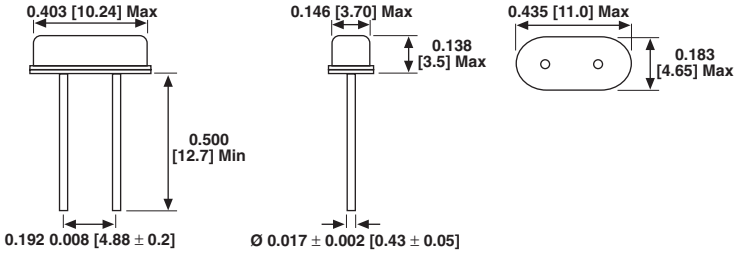
STANDARD ELECTRICAL SPECIFICATIONS

PARAMETER	SYMBOL	CONDITION	UNIT	MIN	TYPICAL	MAX
Frequency Range	F_O		MHz	3.200		66.000
Frequency Tolerance	$\Delta F/F_O$	at 25 °C	ppm	±10	±30	±50
Temperature Stability	TC	ref to 25 °C	ppm	±10	±30	±50
Operating Temperature Range	T_{OPR}		°C	-20		+70
Storing Temperature Range	T_{STG}		°C	-40		+85
Shunt Capacitance	C_O		pF			7
Load Capacitance	CL	Customer Specified	pF	10		Series
Insulator Resistance	IR	100 V_{DC}	MΩ	500		
Drive Level	DL		µW		100	500
Aging (first year)	Fa	at 25 °C, per year	ppm	-5.0		+5.0

EQUIVALENT SERIES RESISTANCE (ESR) AND MODE OF VIBRATION (MODE)

FREQUENCY RANGE (MHZ)	MAX ESR (Ω)	MODE	FREQUENCY RANGE (MHZ)	MAX ESR (Ω)	MODE
3.200 to 4.499	150	Fundamental/AT	9.000 to 9.999	60	Fundamental/AT
4.500 to 5.999	120	Fundamental/AT	10.000 to 12.999	50	Fundamental/AT
6.000 to 6.999	100	Fundamental/AT	13.000 to 30.000	40	Fundamental/AT
7.000 to 7.999	90	Fundamental/AT	30.000 to 66.000	80	3rd Overtone
8.000 to 8.999	80	Fundamental/AT			

DIMENSIONS in inches [millimeters]



ORDERING INFORMATION

XT49S	R	-20	SP	12 M	e2
MODEL	OTR	LOAD	OPTIONS	FREQUENCY/MHz	JEDEC Lead (Pb)-Free STANDARD
	Blank = Standard R = -40 °C to +85 °C	Blank = Series -16 = 16 pF -20 = 20 pF Standard -30 = 30 pF -32 = 32 pF	Blank = Standard SP = Spacer SL = Sleeve		

GLOBAL PART NUMBER

X	T	9	S	2	0	A	N	A	1	2	M
MODEL				LOAD		PACKAGE CODE	OPTIONS		FREQUENCY		