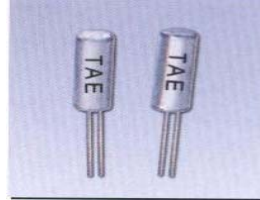


Quartz Crystal Units TAT-308 & TAT-309

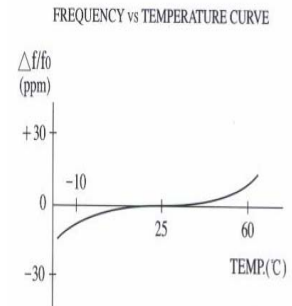
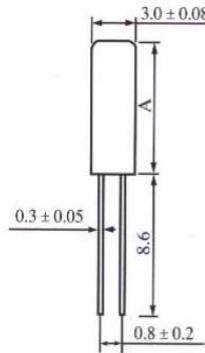
● APPLICATIONS

Radio Communication Equipment, Pagers, Cellular Telephones, Cordless Telephones, PLL Standard Clock, Clock Source for Micro-Computers



Mechanical Dimensions(mm)

Frequency Range	A(mm)
3.0579545MHZ~10.000MHZ	10
10.000MHZ~14.000MHZ	9
14.000MHZ~70.000MHZ	8



Electronic Specifications

Partameter	Symb	Units	Typical	Min	Max	Condition
Frequency Range	fo	MHz		3.579545		
Frequency Tolerance	$\Delta f/fo$	PPm	$\pm 30$	$\pm 10$		At25°C
Temperature Stability	$\Delta f/fo$	PPm	$\pm 30$	$\pm 10$		At25°C
Operaging Temperature Range	T <sub>OPR</sub>	°C	-10~+70			
Storage Temperature Range	T <sub>STG</sub>	°C	-45~+85			
Equivalent Series Resistance	R <sub>1</sub>	$\Omega$	Please see the table below			
Shunt Capacitance	C <sub>0</sub>	pF			5	
Load Capacitance	C <sub>L</sub>	pF	16	8	Series	
Insulator Resistance		M $\Omega$		500		
Drive Level		$\mu$ W	30	10	100	Dc100V $\pm$ 15V
Aging		ppM		$\pm 5.0$		At25°C, per year
Solderability	T <sub>So1</sub>		280°C Max, 5sec. max(package 150°C max			Leads only

Equivalent Series Resistance(ESR) and Mode of Operation(Mode)

Frequency Range	Max ESR( $\Omega$ )	Mode	Frequency Range	Max ESR( $\Omega$ )	Mode
3.5795MHz to 3.999MHz	200	Fundamental/AT	9.000MHz to 13.999MHz	60	Fundamental/AT
4.000MHz to 4.999MHz	150	Fundamental/AT	13.000MHz to 15.999MHz	50	Fundamental/AT
5.000MHz to 5.999MHz	120	Fundamental/AT	15.000MHz to 19.999MHz	40	Fundamental/AT
6.000MHz to 6.999MHz	100	Fundamental/AT	20.000MHz to 29.999MHz	30	Fundamental/AT
7.000MHz to 8.999MHz	80	Fundamental/AT	30.000MHz to 70.000MHz	100	3 <sup>rd</sup> Overtone