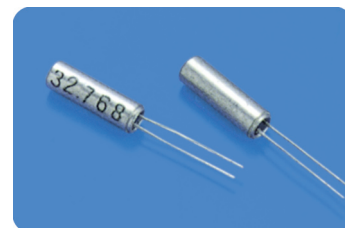


TUNING FORK WATCH CRYSTAL

($\phi 3 \times 8 / \phi 2 \times 6 / \phi 1.5 \times 5$)

FEATURES

- Small size
- Consumer electronics
- Excellent shock and environmental characteristics



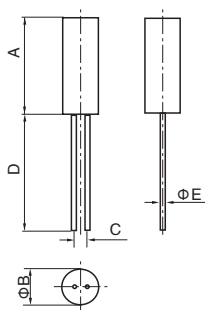
SPECIFICATIONS

ITEM	DESCRIPTION
Frequency range	30.000KHz~350.000KHz
Frequency Tolerance(at 25°C)	$\pm 30\text{ppm(STD)}$ 、 $\pm 20\text{ppm} \sim \pm 50\text{ppm}$ or specify
Turnover Temperature	$25^{\circ}\text{C} \pm 5^{\circ}\text{C}$
Frequency Temperature Cure	$-0.034 \pm 0.006\text{ppm}/^{\circ}\text{C}$
Operating Temperature Range	$-10^{\circ}\text{C} \sim +60^{\circ}\text{C}$ 、 $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$ 、 $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ or specify
Equivalent Series Resistance	see table No.1
Storage Temperature Range	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
Shunt Capacitance (Co)	1.5pF Typ
Dynamic Capacitance(C1)	3.0fF Typ
Load Capacitance (CL)	12.5pF(standard)、6.0pF~12.5pF or specify
Drive Level	1.0uw
Insulation Resistance	500M ohms Min / DC 100V
Aging	$\pm 3\text{ppm/year}$

EQUIVALENT SERIES RESISTANCE(ESR) TABLE No.1

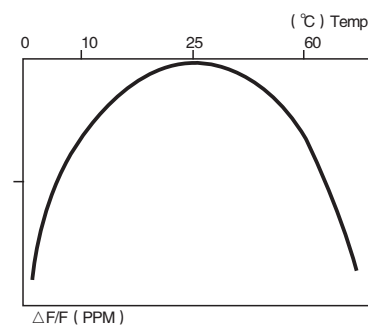
Frequency Range	Mode	ESR(Ω)	Frequency Range	Mode	ESR(Ω)
30.000KHz~40.000KHz	Fundamental	40K Max	70.000KHz~200.000KHz	Fundamental	22.5K Max
40.000KHz~60.000KHz	Fundamental	30K Max	200.000KHz~350.000KHz	Fundamental	20K Max
60.000KHz~70.000KHz	Fundamental	25K Max			

OUTLINE DIMENSIONS (mm)



MODE	A	B	C	D	E
$\phi 3 \times 8\text{mm}$	8.3	3.1	1.1	10.0	0.35
$\phi 2 \times 6\text{mm}$	6.3	2.1	0.7	10.0	0.26
$\phi 1.5 \times 5\text{mm}$	5.1	1.5	0.45	4.3	0.2

TEMPERATURE CHARACTERISTICS



PART NUMBER

TIM-	XW308	F	32.768	± 20	$-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$	12.5	30
Type	oscillator mode	Frequency(KHz)	Frequency tolerance (ppm)	operating temperature range	Load capacitance(pf)	ESR(K Ω) Max	
XW308: $\phi 3 \times 8$	F: Fundamental	32.768:	$\pm 20: \pm 20\text{ppm}$		12.5: 12.5pf	30: 30K Ω Max	
XW206: $\phi 2 \times 6$		32.768KHz			00: SERIES		
XW155: $\phi 1.5 \times 5$							