



CYLINDER TYPE CRYSTAL

 $(\phi 3 \times 9 / \phi 3 \times 8 / \phi 3 \times 6)$

FEATURES

- Small size
- Good Frequency Stability
- Outstanding shock resistance, vibration resistance environmental characteristics



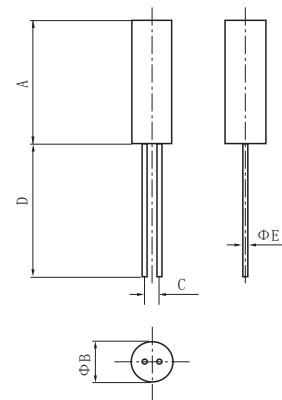
SPECIFICATIONS

ITEM	DESCRIPTION
Frequency range	3.579000MHz~50.000000MHz
Frequency Tolerance(at 25°C)	$\pm 30\text{ppm(STD)}$ 、 $\pm 3\text{ppm}$ ~ $\pm 50\text{ppm}$ or specify
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
Frequency Stability Over Operating Temp Characteristics	$\pm 30\text{ppm(STD)}$ 、 $\pm 3\text{ppm}$ ~ $\pm 50\text{ppm}$ or specify
Equivalent Series Resistance	see table No.1
Storage Temperature Range	-40°C ~ $+85^{\circ}\text{C}$
Shunt Capacitance (Co)	5.0pF Max
Load Capacitance (CL)	series 12pF、16pF、18pF、20pF or specify
Drive Level	10uw~100uw
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)
3.579MHz~3.999MHz	Fundamental	180Max
4.000MHz~4.499MHz	Fundamental	150Max
4.500MHz~4.999MHz	Fundamental	120Max
5.000MHz~6.999MHz	Fundamental	100Max
7.000MHz~9.999MHz	Fundamental	80Max
10.000MHz~11.999MHz	Fundamental	60Max
12.000MHz~29.999MHz	Fundamental	40Max
30.000MHz~50.000MHz	3rd Overtone	80Max

OUTLINE DIMENSIONS (mm)



MODE	A	B	C	D	E
$\phi 3 \times 9\text{mm}$	9.3	3.1	1.1	10.0	0.35
$\phi 3 \times 8\text{mm}$	8.3	3.1	1.1	10.0	0.26
$\phi 2 \times 6\text{mm}$	6.3	1.95	0.7	7	0.2

PART NUMBER

TIM	XC309	F	16.000000	± 30	± 50	$-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$	20	40
Type	oscillator mode	Frequency (MHz)	Frequency tolerance (ppm)	temperature stability (ppm)	operating temperature range	Load capacitance (pf)	ESR (Ω) Max	
XC309: $\phi 3 \times 9\text{mm}$	F: Fundamental	16.000000:	$\pm 30: \pm 30\text{ppm}$	$\pm 50: \pm 50\text{ppm}$		20:20pf		
XC308: $\phi 3 \times 8\text{mm}$		16.000000:				00:SERIES		40:40 Ω Max
XC206: $\phi 2 \times 6\text{mm}$	3:3rd Overtone	16.000000MHz						