

Quartz Crystals

Surface Mount	
X2012	X3215
[2.05 * 1.2 * 0.55 mm]	[3.2 * 1.5 * 0.8 mm]

Thru - Hole type	
T26G	T38G
[2.0 § * 6.0 mm]	[3.0 § * 8.0 mm]

32.768 KHz

Frequency Tolerance options		
± 5 ppm	± 10 ppm	± 20 ppm

Features

Specifications

Ultra compact, thin, and light weight tuning fork crystal unit

- Excellent heat resistance and environmental characteristics
- Excellent electrical performance optimum for mobile communications, OA (office automation) and AV (audiovisual) applications
- RoHS Compliant. Meets the re-flow profiling requirements using lead-free solder



General Specifications

Frequency Range	32.768 KHz			
Hold type	Surface Mount Type		Thru - Hole Type	
Item / Type	X2012	X3215	T26	T38
Package sizes	[2.05 * 1.2 * 0.55 mm]	[3.2 * 1.5 * 0.8 mm]	[2.0 § * 6.0 mm]	[3.0 § * 8.0 mm]
Shunt Capacitance	1.3 pF typ. / 1.5 pF max.		1.5 pF max.	0.9 pF max.
Equivalent series resistance	80 KΩ max.		40 KΩ max.	35 KΩ max.
Temperature coefficient	- 0.04 x 10 ⁻⁶ / °C ² max.		- 0.035 x 10 ⁻⁶ / °C ² max.	
Drive Level	0.1 μW typical (0.5 μW max.)		1.0 μW typical	
Operating Temperature Range	- 40 °C to 85 °C		- 10 °C to 60 °C	
Storage Temperature Range	- 40 °C to 125 °C		- 40 °C to 85 °C	
Crystal Cut	XT - Cut			
Load Capacitance	7 pF , 9 pF or 12.5 pF			
Frequency Tolerance	± 5 ppm , ± 10 ppm , ± 20 ppm (max.) at 25 °C			
Turning POINT	+ 25 °C ± 5 °C			
Insulation resistance	500 MΩ min.			

Outline Dimensions (Unit : mm)

X2012	X3215
T26G	T38G