RoHS 2011/65/EU REACH compliant Conflict minerals free

GEYER quartz technology

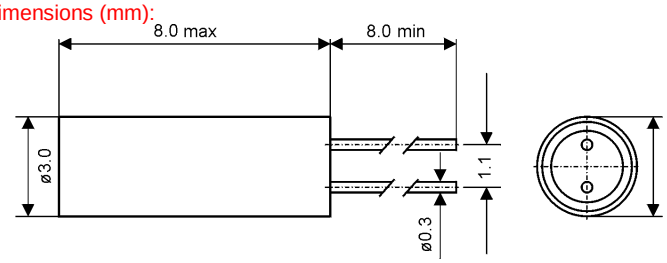
Quartz Crystal

Cylindrical type

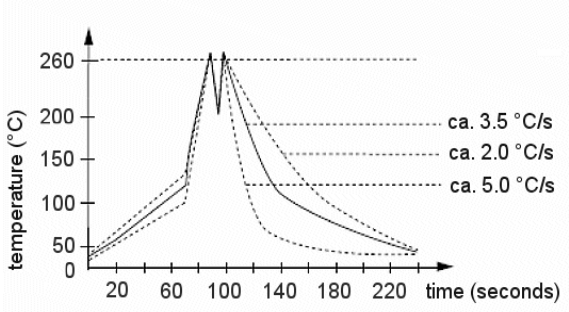
model	KX-38	
frequency	32,768 kHz	
holder type	3 x 8 mm	
operating temperature	standard - 20°C ~ +70°C available - 40°C ~ +85°C (= KX-38T)	
frequency tolerance at +25°C	± 20 ppm	
temperature tolerance at -20° ~ +70°C at -40° ~ +85C	-0.042ppm / °C² typ.	
load capacitance C_L	6 pF	12,5 pF
series resistance R1 max.	30k Ohm	
aging at +25°C (first year) max.	± 3 ppm	
shunt capacitance C_0 max.	1,3 pF	
drive level max.	0,02 (0,01 typ) mW	
solderable	wave soldering max. 10s 260°C following reflow soldering only up to 240°C	
part no.	12.xxxxx	

Please note our Quartz Crystal Handling Notes

Dimensions (mm):



Wave soldering condition:



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Lead cutting for through hole versions:

One sensitive part in through hole crystals is the glass isolator section. Mechanical stress during lead bending or lead cutting can create micro cracks in the glass. The wire must be mechanically fixed between the bending or cutting point and the glass area. Do not cut or bend the wire at less than 3.0 mm distance from the base plate. Do not solder the crystal housing, use rubber glue or SMD clips to fix the housing.

Soldering:

All through hole crystals are suitable for the standard wave soldering lines. SMD versions can be used for reflow soldering versions according to our soldering conditions which will be find on our relevant datasheets. If soldering processes are used with higher temperatures (lead free soldering) or other soldering methods please contact us. The crystal frequency can change by a few ppm after the soldering process. The change will recover after a few hours or days without any damages.

Cleaning:

Crystal can be cleaned with conventional cleaning methods. Ultrasonic cleaning is acceptable up to 20KHz. Higher frequencies can destroy the crystal blank. The ultra sonic conditions can change according to different pc-boards sizes and weights. Cleaning tests from the customer side will then avoid any further damages.

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