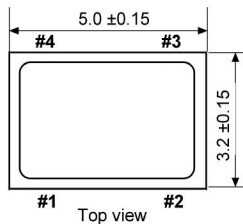


Quartz Crystal

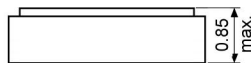
SMD-version

part no.	12.xxxxx	
model	KX – 9A	
frequency range	7.680 ~ 300.0 MHz	
mode	fundamental, 3rd overtone; 5th overtone	
operating temperature	standard -20° ~ +70°C available -40° ~ +85°C (=KX-9AT); -40° ~ +105°C (=KX-9AE)	
frequency tolerance at +25°C	standard ±30 ppm; available ±10 ~ ±50 ppm	
temperature tolerance at -20° ~ +70°C; -40° ~ +85°C; -40° ~ +105°C	standard ±50 ppm; available ±10 ~ ±100 ppm standard ±120 ppm; available ±30 ~ ±120 ppm	
load capacitance C _L	standard 16 pF; available 10 ~ 20 pF	
series resistance R1 (ESR) max.	fundamental 7.68 ~ 7.99 MHz 330 Ohm 8.0 ~ 12.0 MHz 100 Ohm 12.1 ~ 16.0 MHz 80 Ohm 16.1 ~ 20.0 MHz 60 Ohm 20.1 ~ 50.0 MHz 40 Ohm 50.1 ~ 130.0 MHz 30 Ohm	3rd overtone 70.0 ~ 300.0 MHz 80 Ohm 5th overtone 120.0 ~ 250.0 MHz 80 Ohm
aging at +25°C (first year) max.	±2 ppm	
shunt capacitance C ₀ max.	5.0 pF	
drive level max.	200 μW	
contents of reel	1000 pcs.	

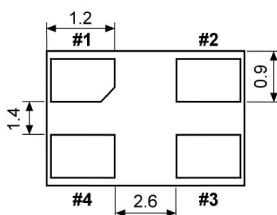
Dimensions:



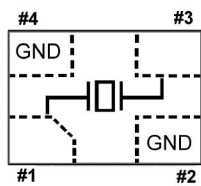
Top view



Side view



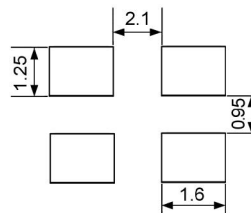
Bottom view



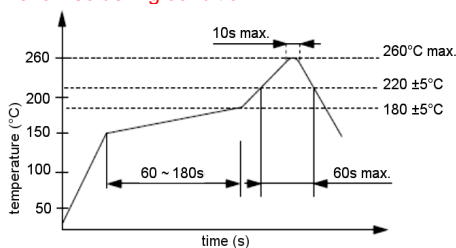
Top view connections

(#2 & #4: connected to metal lid)

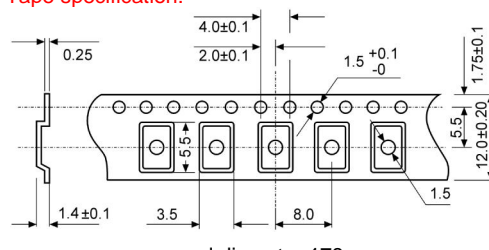
Suggested soldering pad:



Reflow soldering condition:



Tape specification:



reel diameter 178 mm