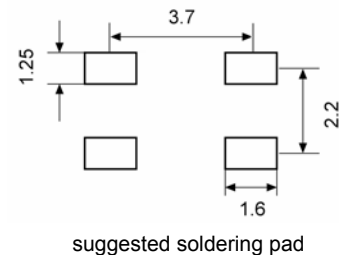
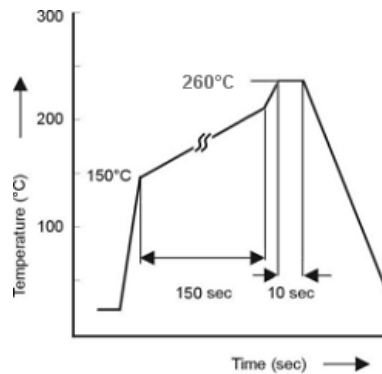
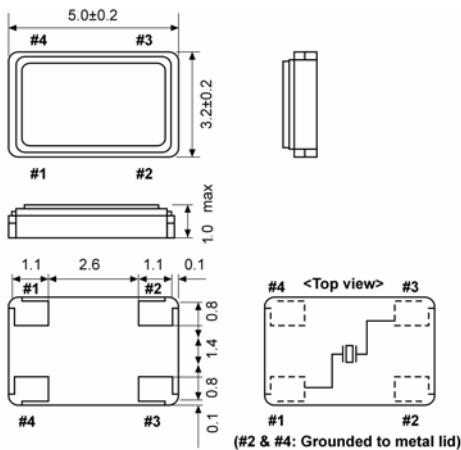
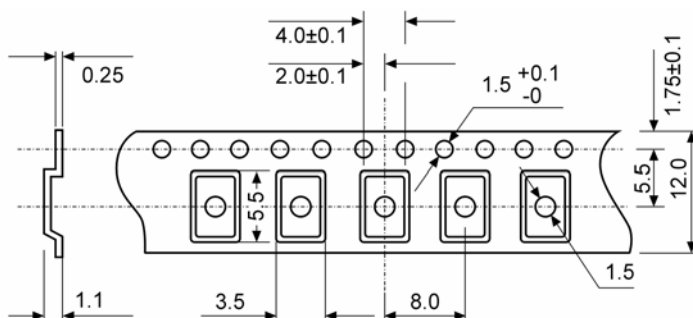


Quartz Crystal	MHz range	SMD-version																					
model	KX – 9A																						
frequency range	8,0 ~ 300,0 MHz																						
mode	fundamental, 3 rd overtone, 5 th overtone																						
operating temperature	standard -20° ~ + 70°C available -40° ~ + 85°C (=KX-9AT) available -40° ~ +105°C (=KX-9AE)																						
frequency tolerance at +25°C	standard ± 30 ppm available ± 10 ~ ± 50 ppm																						
temperature tolerance -20° ~ + 70°C -40° ~ + 85°C -40° ~ +105°C	standard ± 50 ppm, available ±10 ~ ± 50 ppm standard ±100 ppm, available ±20 ~ ± 100 ppm standard ±120 ppm, available ±30 ~ ± 120 ppm																						
load capacitance C _L	standard 16 pF available 10 ~ 20 pF																						
series resonance R ₁ max.	<table border="0"> <tr> <td>fundamental</td> <td>8,0 ~ 12,0 MHz</td> <td>100 Ohm</td> </tr> <tr> <td></td> <td>12,1 ~ 16,0 MHz</td> <td>80 Ohm</td> </tr> <tr> <td></td> <td>16,1 ~ 20,0 MHz</td> <td>60 Ohm</td> </tr> <tr> <td></td> <td>20,1 ~ 50,0 MHz</td> <td>40 Ohm</td> </tr> <tr> <td></td> <td>50,1 ~ 130,0 MHz</td> <td>30 Ohm</td> </tr> <tr> <td>3rd overtone</td> <td>70,0 ~ 300,0 MHz</td> <td>80 Ohm</td> </tr> <tr> <td>5th overtone</td> <td>120,0 ~ 250,0 MHz</td> <td>80 Ohm</td> </tr> </table>		fundamental	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	3 rd overtone	70,0 ~ 300,0 MHz	80 Ohm	5 th overtone	120,0 ~ 250,0 MHz	80 Ohm
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aging (first year)	± 2 ppm																						
shunt capacitance C ₀ max.	5,0 pF																						
drive level in mW max.	0,05																						
contents of reel	1000 pcs.																						
RoHS	since production start																						
part no.	12.89000 ~ 12.89199																						



soldering condition



(mm) reel diameter 178 mm