

FEATURES

- WORLDWIDE CHEAPEST AVAILABLE SMD-WATCH-CRYSTAL
- HIGH PERFORMANCE FOR LOW COST
- STANDARD OPERATING TEMPERATURE RANGE OF -40/+85°C
- EXCELLENT CLOCK SIGNAL GENERATUR FOR CPU'S

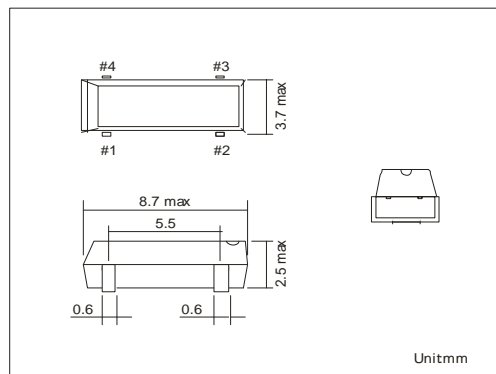
SMD-WATCH-CRYSTAL SERIES	M8208
PACKAGE DIMENSIONS	see drawing
FREQUENCY	32.768 kHz
FREQUENCY TOLERANCE AT 25°C	+/-20 ppm (standard) / +/-10 ppm or +/-30 ppm (option)
LOAD CAPACITANCE	12.5 pF (standard) / 6 pF, 7 pF, 8pF and 9 pF available on demand
SERIES RESISTANCE	50 kΩ max.
OPERATING TEMPERATURE RANGE	-40/+85°C
STORAGE TEMPERATURE RANGE	-55/+125°C
TWO DIMENSIONAL TEMPERATURE CONSTANT	-0.035 ppm/°C ²
TURNOVER TEMPERATURE	+25°C +/-5°C
DRIVE LEVEL	1.0 μW max.
SHUNT CAPACITANCE C0	1.0 pF typical
AGING	+5 ppm max. per year
RoHS	RoHS compliant according to 2002/95/EC
DELIVERY FORM	Tape and Reel (1.000 ~ 3.000 pcs per reel)
OTHER PARAMETERS ARE AVAILABLE ON REQUEST / CREATE HERE YOUR SPECIFICATION	

PART NUMBERING SYSTEM

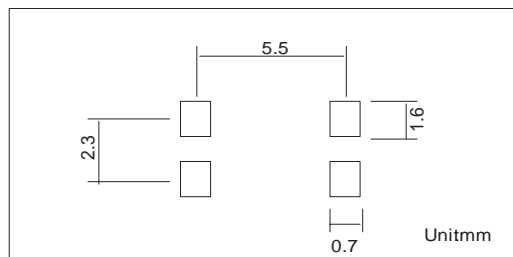
EXAMPLE	M8208 32.768 kHz +/-20 ppm 12.5pF (-40/+85°C)
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PACKAGE	M8208
FREQUENCY	32.768 kHz
FREQUENCY TOLERANCE AT 25°C	REQUIRED VALUE
TEMPERATURE RANGE	-40/+85°C standard
LOAD CAPACITANCE	REQUIRED VALUE

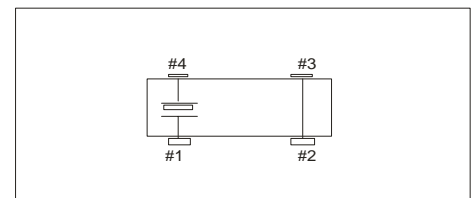
OUTLINE DRAWING



RECOMMENDED LAND PATTERN



INTERNAL CONNECTIONS



Pad Connection:

#1 = Crystal

#2 = N/C

#3 = N/C

#4 = Crystal

Do not connect pad #2 + #3 to GND.

This is absolutely forbidden.