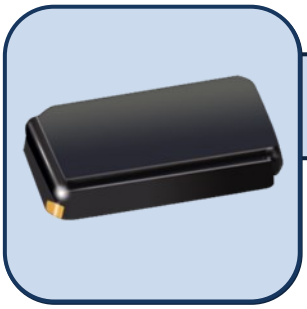
PETERMANN-TECHNIK GmbH
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SMD WATCH CRYSTAL SERIES M4819

FEATURES

- High reliability for low cost
- Ultra low profile
- Operating temperature range of -40/+85°C
- Excellent clock signal generatur for CPU´s

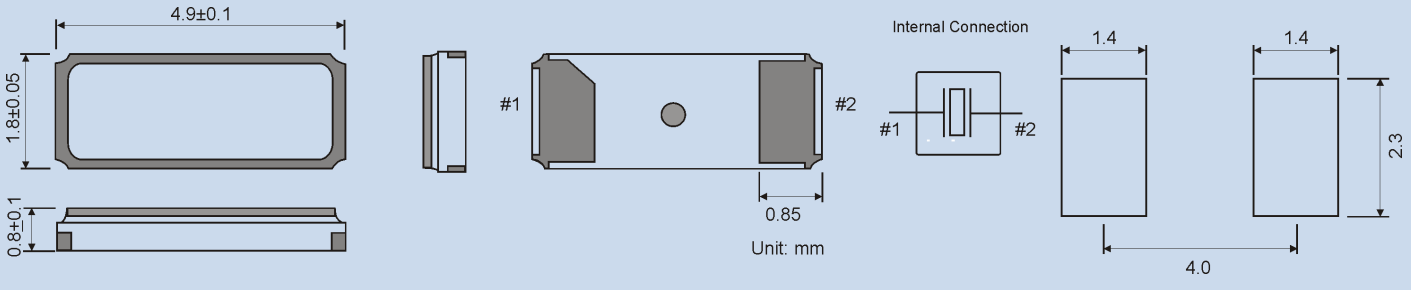
RoHS-2 2011/65/EU compliant

GENERAL DATA

SMD-CRYSTAL SERIES	M4819 (4.8x1.9x0.9mm)
NUMBER OF SOLDER PADS	2
FREQUENCY RANGE	32.768 kHz
FREQUENCY TOLERANCES AT 25°C	±20 ppm (standard) / ±10 ~ ±100 ppm (option)
LOAD CAPACITANCE (C_L)	12.5 pF (standard) 7,8,9 and 12pF available on request
WORKING TEMPERATURE RANGES	-40/+85°C
RESONANCE RESISTANCE	80 kΩ max.
SHUNT CAPACITANCE C0	1.15 pF typ.
TURNOVER TEMPERATURE	+25°C ±5°C
PARABOLIC COEFFICIENT	-0.04 ppm/°C²
DRIVE LEVEL	0.5 µW typical (1.0 µW max.)
AGING	±3 ppm max. per year
INSULATION RESISTANCE	>500 MΩ DC/100V ±10%
STORAGE TEMPERATURE	-55°+125°C
DELIVERY FORM	Tape and Reel (3.000 pcs per reel)

OTHER PARAMETERS ARE AVAILABLE ON REQUEST / CREATE HERE YOUR SPECIFICATION

DIMENSIONS



CRYSTALS
OSCILLATORS
CERAMIC RESONATORS

Premium Quality by PETERMANN-TECHNIK

CERAMIC FILTERS
SAW COMPONENTS

Spec.01 • REV.00 • June 2013

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ORDERING INFORMATION

Series	Frequency	Frequency Stability at 25°C	Temperature Range	Load Capacitance
M4819	32.768 kHz	20	-40+85°C	12.5 pF