

## SMD WATCH CRYSTAL SERIES M2015

### FEATURES

Pb free  
 RoHS-2 2011/65/EU  
 compliant

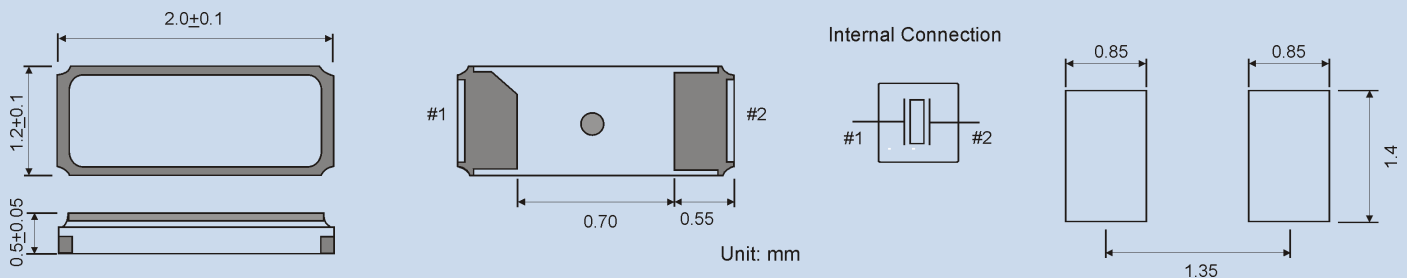
- Smallest available low cost watch crystal
- Ultra low profile
- Standard operating temperature range of -40/+85°C
- Excellent clock signal generator for CPU's

### GENERAL DATA

SMD-CRYSTAL SERIES	M2015	(2.0x1.2x0.55mm)
NUMBER OF SOLDER PADS	2	
FREQUENCY RANGE	32.768 kHz	
FREQUENCY TOLERANCES AT 25°C	±20 ppm (standard)	
LOAD CAPACITANCE (C <sub>L</sub> )	12.5 pF (standard)	6,7,9 and 10pF available on request
WORKING TEMPERATURE RANGES	-40/+85°C	
RESONANCE RESISTANCE	90 kΩ max.	
SHUNT CAPACITANCE C <sub>0</sub>	1 pF typ.	
TURNOVER TEMPERATURE	+25°C +5°C	
PARABOLIC COEFFICIENT	-0.04 ppm/°C <sup>2</sup>	
DRIVE LEVEL	0.2 μW typical (1.0 μW max.)	
AGING	±3 ppm max. per year	
INSULATION RESISTANCE	>500 MΩ DC/100V ±10%	
STORAGE TEMPERATURE	-40°/+85°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

## ORDERING INFORMATION

Series

M2015

Frequency

32.768 kHz

Frequency  
Stability at  
25°C

20

Temperature  
Range

-40+85°C

Load  
Capacitance

12.5 pF

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