

## SMD QUARTZ CRYSTAL SERIES SMD1045

### FEATURES

- ☐ Low frequencies available
- ☐ Low profile – 1.4 mm max. package height
- ☐ Extended temperature range up to -40/85°C available
- ☐ Excellent clock signal generator for CPU's

Pb free  
RoHS-2 2011/65/EU  
compliant

### GENERAL DATA

|                                    |                                                          |
|------------------------------------|----------------------------------------------------------|
| SMD-CRYSTAL SERIES                 | SMD1045/4 (10.0x4.5x1.4mm)<br>SMD1045/2 (10.0x4.5x1.4mm) |
| NUMBER OF SOLDER PADS              | SMD1045/4 = 4<br>SMD1045/2 = 2                           |
| FREQUENCY RANGE                    | 3.2768 ~ 10.0 MHz AT-Fundamental                         |
| FREQUENCY TOLERANCES AT 25°C       | ±20 ppm ~ ±50 ppm                                        |
| LOAD CAPACITANCE (C <sub>L</sub> ) | 10 pF ~ 30 pF or Series, 18 pF standard                  |
| WORKING TEMPERATURE RANGES         | 0/+50°C ~ -40/+85°C                                      |
| RESONANCE RESISTANCE               | 120 Ω max.                                               |
| SHUNT CAPACITANCE C <sub>0</sub>   | 7 pF max.                                                |
| DRIVE LEVEL                        | 0.1 mW standard (optional 0.5 mW available)              |
| AGING                              | ±5 ppm per year                                          |
| INSULATION RESISTANCE              | >500 MΩ DC/100V ±10%                                     |
| STORAGE TEMPERATURE                | -55°+125°C                                               |
| DELIVERY FORM                      | Tape and Reel (1.000 pcs per reel)                       |

OTHER PARAMETERS ARE AVAILABLE ON REQUEST / CREATE HERE YOUR SPECIFICATION

### FREQUENCY STABILITY VS. TEMPERATURE

|            | ±15ppm                   | ±20ppm                   | ±30ppm                   | ±50ppm                   |
|------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 0°/+50°C   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| -10°/+60°C | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0°/+70°C   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| -20°/+70°C |                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| -40°/+85°C |                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

CRYSTALS

OSCILLATORS

CERAMIC RESONATORS



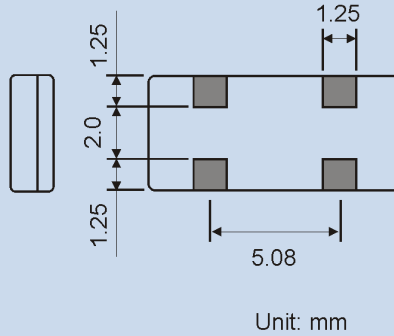
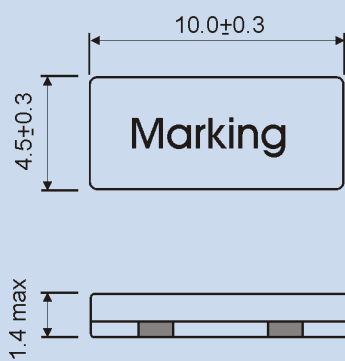
Premium Quality by  
PETERMANN-TECHNIK

CERAMIC FILTERS

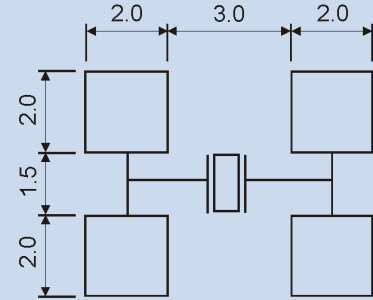
SAW COMPONENTS

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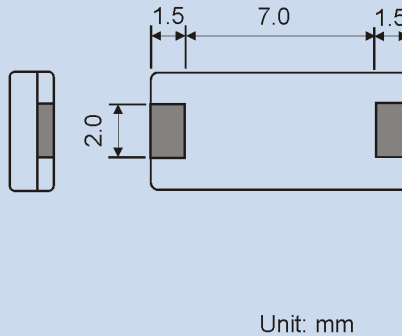
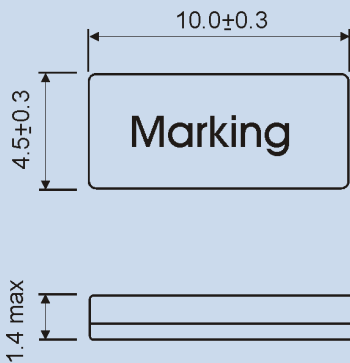
## DIMENSIONS OF SMD1045/4



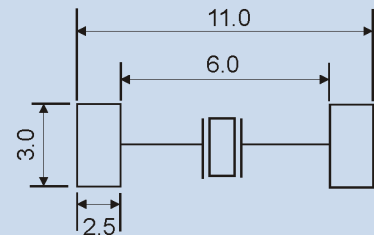
RECOMMENDED SOLDERING LAYOUT



## DIMENSIONS OF SMD1045/2



RECOMMENDED SOLDERING LAYOUT



## ORDERING INFORMATION

| Series    | Frequency | Frequency Stability at 25°C | Temperature Stability | Temperature Range | Load Capacitance |
|-----------|-----------|-----------------------------|-----------------------|-------------------|------------------|
| SMD1045/4 | 4.000 MHz | 30                          | 50                    | -40+85°C          | 18 pF            |

**CRYSTALS**  
**OSCILLATORS**  
**CERAMIC RESONATORS**



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**CERAMIC FILTERS**  
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