

SMD QUARTZ CRYSTAL SERIES SMD0507/2

FEATURES

- Large frequency spectrum available
- Low profile – 1.3 mm max. package height
- Extended temperature range up to -40/+125°C available
- Excellent clock signal generator for CPU's
- Qualified for automotive applications
- Do not use for new designs – please use SMD0507/4 for new designs

Pb free
 RoHS-2 2011/65/EU
 compliant

GENERAL DATA

SMD-CRYSTAL SERIES	SMD0507/2 (7.0x5.0x1.3mm)
NUMBER OF SOLDER PADS	2 Please do not use this housing for new design Please use <u>SMD0507/4</u> for new design
FREQUENCY RANGE	6.0 ~ 40.0 MHz AT-Fundamental
FREQUENCY TOLERANCES AT 25°C	±20 ppm ~ ±50 ppm
LOAD CAPACITANCE (C _L)	10 pF ~ 30 pF or Series
WORKING TEMPERATURE RANGES	0/+50°C ~ -40/+85°C
RESONANCE RESISTANCE	80 Ω max.
SHUNT CAPACITANCE C ₀	7 pF max.
DRIVE LEVEL	0.01 mW ~ 0.1 mW std. (optional 0.5 mW available)
AGING	±5 ppm per year standard
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"/>	<input type="checkbox"/>
-40°/+85°C		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRYSTALS
OSCILLATORS
CERAMIC RESONATORS

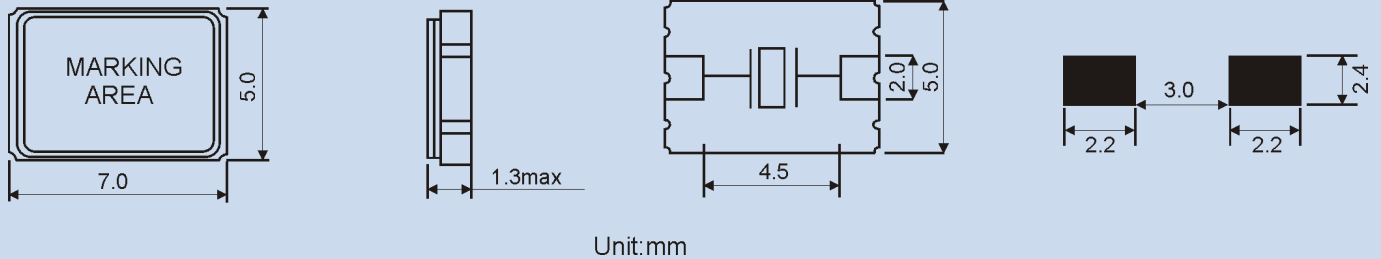


Premium Quality by
PETERMANN-TECHNIK

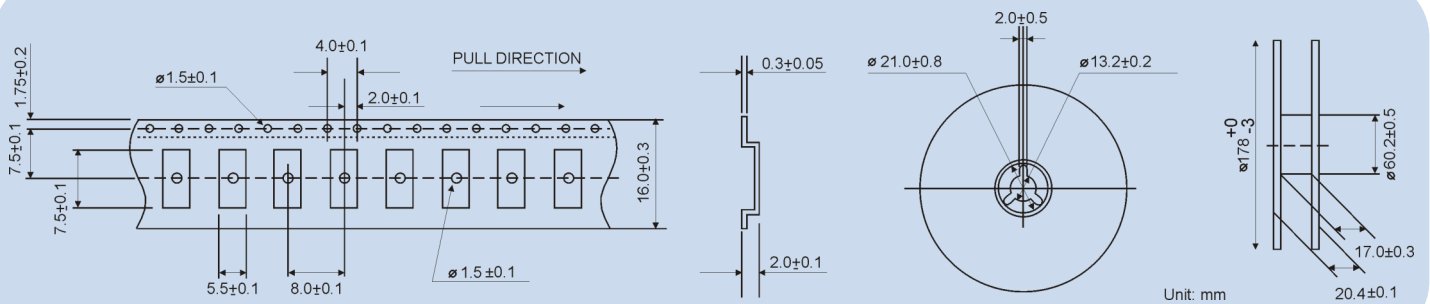
CERAMIC FILTERS
SAW COMPONENTS

Spec.01 • REV.00 • June 2013

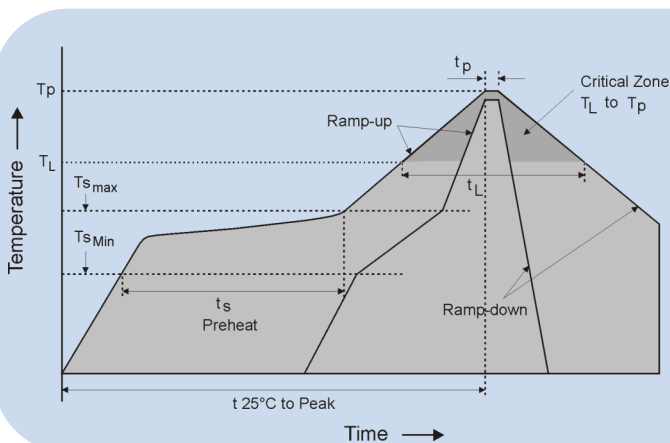
DIMENSIONS



REEL SPECIFICATION



REFLOW SOLDER PROFILE



Profile Feature	Pb-Free Assembly
Average ramp-up rate (TL to TP)	3°C/second max.
Preheat:	
Temperature Min (Tsmin)	150°C
Temperature Max (Tsmax)	200°C
Time (min to max) (ts)	60-180 seconds
Time maintained above:	
Temperature (TL)	217°C
Time (tL)	60-150 seconds
Peak/Classification Temperature (Tp)	240°C
Time within 5°C of actual Peak Temperature (tp)	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

CRYSTALS
OSCILLATORS
CERAMIC RESONATORS



Premium Quality by
PETERMANN-TECHNIK

CERAMIC FILTERS
SAW COMPONENTS

Spec.01 • REV.00 • June 2013

ORDERING INFORMATION

Series	Frequency	Frequency Stability at 25°C	Temperature Stability	Temperature Range	Load Capacitance
SMD0507/2	27.000 MHz	30	50	-40+85°C	20 pF

Example: SMD0507/2 27.000 MHz 30/50/-40+85/20pF
PLEASE INDICATE YOUR REQUIRED PARAMETERS

CRYSTALS
OSCILLATORS
CERAMIC RESONATORS



Premium Quality by
PETERMANN-TECHNIK

CERAMIC FILTERS
SAW COMPONENTS

Spec.01 • REV.00 • June 2013