

SMD QUARTZ CRYSTAL SERIES SMD0507/4

FEATURES

- ☐ High reliability for low cost / Large frequency spectrum available
- ☐ Low profile ceramic package – 1.3 mm max. package height
- ☐ Extended temperature range to -40/125°C available
- ☐ Excellent clock signal generator for CPU's
- ☐ Qualified for automotive applications

Pb free
RoHS-2 2011/65/EU
compliant

GENERAL DATA

SMD-CRYSTAL SERIES	SMD0507/4 (7.0x5.0x1.3mm)
NUMBER OF SOLDER PADS	4
FREQUENCY RANGE	6.00 ~ 45.0 MHz AT-FUNDAMENTAL 40.0 ~ 80.0 MHz 3 rd Overtone
FREQUENCY TOLERANCES AT 25°C	±5 ppm ~ ±50 ppm
LOAD CAPACITANCE (C _L)	6 pF ~ 50 pF or Series
WORKING TEMPERATURE RANGES	0/+50°C ~ -40/+125°C
SHUNT CAPACITANCE C ₀	7 pF max.
DRIVE LEVEL	0.01 mW ~ 0.1 mW standard (optional 1.0 mW available)
AGING	±2 ppm per year standard (optional ±1 ppm available)
INSULATION RESISTANCE	>500 MΩ DC/100V ±10%
STORAGE TEMPERATURE	-55°+125°C
DELIVERY FORM	Tape and Reel (1.000 pcs per reel)
<u>OTHER PARAMETERS ARE AVAILABLE ON REQUEST / CREATE HERE YOUR SPECIFICATION</u>	

FREQUENCY STABILITY VS. TEMPERATURE

	±3ppm	±5ppm	±10ppm	±15ppm	±20ppm	±30ppm	±50ppm
0°/+50°C	☐	☐	☐	☐	☐	☐	☐
-10°/+60°C		☐	☐	☐	☐	☐	☐
0°/+70°C		☐	☐	☐	☐	☐	☐
-20°/+70°C			☐	☐	☐	☐	☐
-40°/+85°C				☐	☐	☐	☐
-40°/+125°C							☐

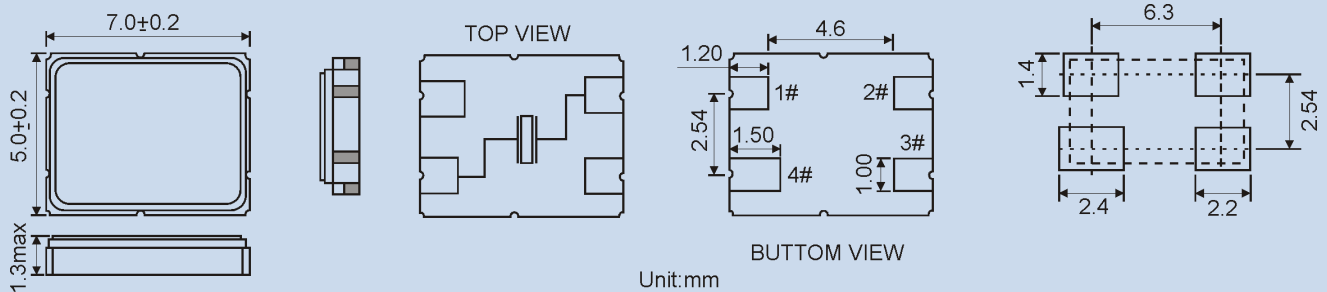
CRYSTALS
OSCILLATORS
CERAMIC RESONATORS



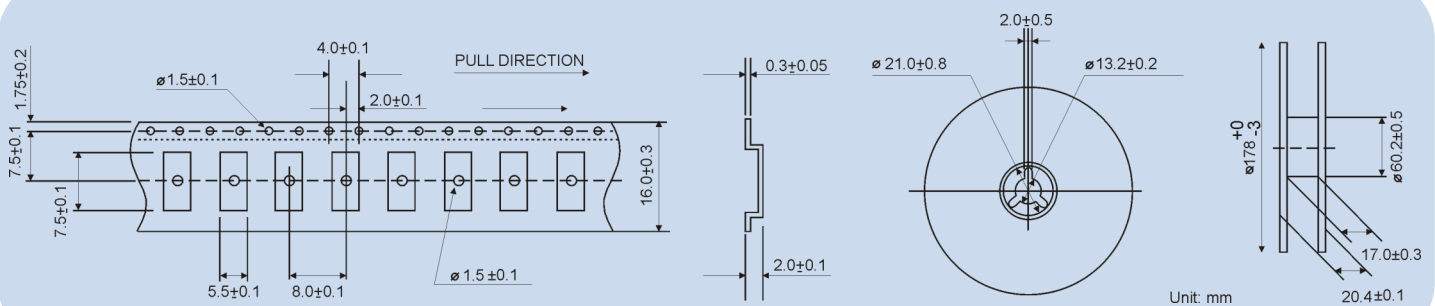
CERAMIC FILTERS
SAW COMPONENTS

Spec.01 • REV.00 • June 2013

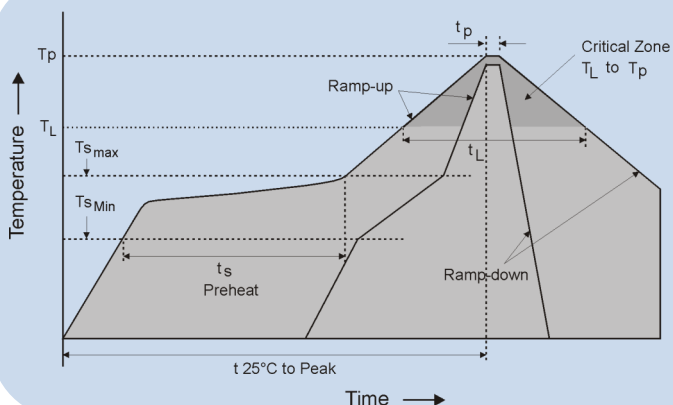
DIMENSIONS



REEL SPECIFICATION



REFLOW SOLDER PROFILE



Profile Feature	Pb-Free Assembly
Average ramp-up rate (T_L to T_p)	3°C/second max.
Preheat:	
Temperature Min (T_{smin})	150°C
Temperature Max (T_{smax})	200°C
Time (min to max) (t_s)	60-180 seconds
Time maintained above:	
Temperature (T_L)	217°C
Time (t_L)	60-150 seconds
Peak/Classification Temperature (T_p)	240°C
Time within 5°C of actual Peak Temperature (t_p)	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

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Premium Quality by
PETERMANN-TECHNIK

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ORDERING INFORMATION

Series	Frequency	Frequency Stability at 25°C	Temperature Stability	Temperature Range	Load Capacitance
SMD0507/4	27.000 MHz	30	50	-40+85°C	20 pF

Example: SMD0507/4 27.000 MHz 30/50/-40+85/20pF
PLEASE INDICATE YOUR REQUIRED PARAMETERS

RESONANCE RESISTANCE

Frequency in MHz	Vibration mode	ESR max. in Ω
6.0 ~ 45.0 MHz	AT Fund.	80
30.0 ~ 40.0 MHz	3rd OT AT	100
40.0 ~ 80.0 MHz	3rd OT AT	80

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