

SMD QUARTZ CRYSTAL SERIES SMD0603/4

FEATURES

- High reliability for low cost
- Low profile – 1.2 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	SMD0603/4 (6.0x3.5x1.2mm)
NUMBER OF SOLDER PADS	4
FREQUENCY RANGE	8.00 ~ 50.0 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 0.5 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)
OTHER PARAMETERS ARE AVAILABLE ON REQUEST / CREATE HERE YOUR SPECIFICATION	

FREQUENCY STABILITY VS. TEMPERATURE

	±10ppm	±15ppm	±20ppm	±30ppm	±50ppm
0°/+50°C	<input type="checkbox"/>	<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"/>	<input type="checkbox"/>
0°/+70°C	<input type="checkbox"/>	<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"/>	<input type="checkbox"/>
-40°/+85°C		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-40°/+125°C					<input type="checkbox"/>

CRYSTALS
OSCILLATORS
CERAMIC RESONATORS

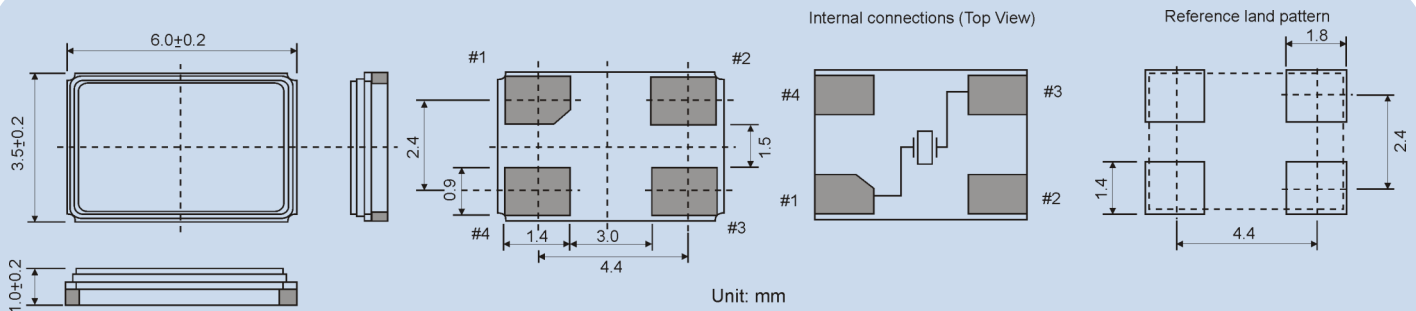


Premium Quality by
PETERMANN-TECHNIK

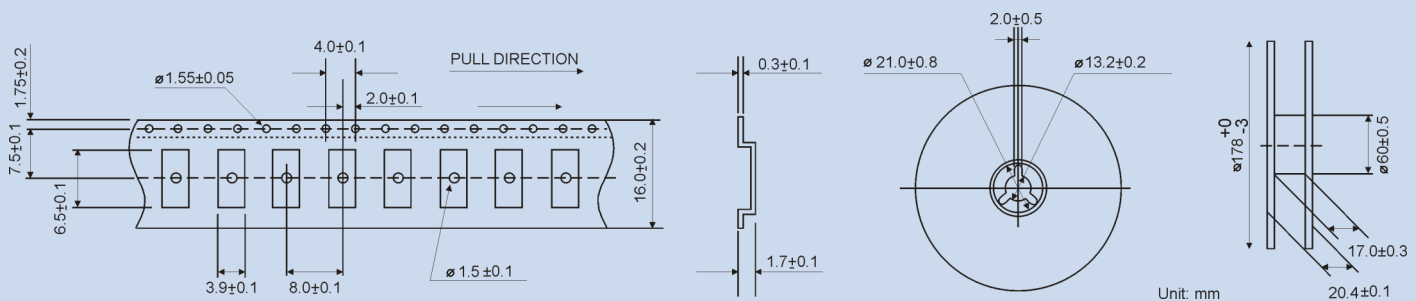
CERAMIC FILTERS
SAW COMPONENTS

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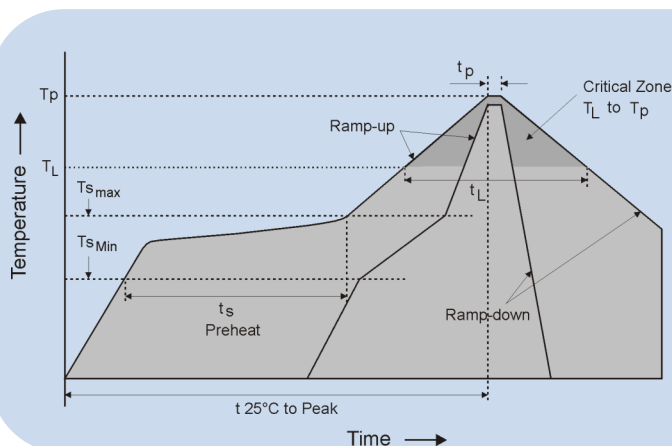
DIMENSIONS



REEL SPECIFICATION



REFLOW SOLDER PROFILE



Profile Feature	Pb-Free Assembly
Average ramp-up rate (TL to TP)	3°C/second max.
Preheat:	
Temperature Min (T _{Smin})	150°C
Temperature Max (T _{Smax})	200°C
Time (min to max) (t _s)	60-180 seconds
Time maintained above:	
Temperature (TL)	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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ORDERING INFORMATION

Series	Frequency	Frequency Stability at 25°C	Temperature Stability	Temperature Range	Load Capacitance
SMD0603/4	27.000 MHz	30	50	-40+85°C	20 pF

Example: SMD0603/4 27.000 MHz 30/50/-40+85/20pF
 PLEASE INDICATE YOUR REQUIRED PARAMETERS

RESONANCE RESISTANCE

Frequency in MHz	Vibration mode	ESR max. in Ω
8.0 ~ 12.0 MHz	AT Fund.	80
12.0 ~ 16.0 MHz	AT Fund.	60
16.0 ~ 25.0 MHz	AT Fund.	50
25.0 ~ 30.0 MHz	AT Fund.	35
30.0 ~ 50.0 MHz	AT Fund.	30
40.0 ~ 80.0 MHz	3rd OT AT	80 ~ 100

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