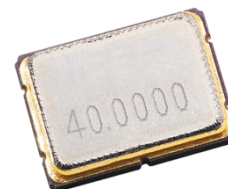


SMD QUARTZ CRYSTAL

SERIES SMD0603/2 (2 pad housing 6.0x3.5mm)

FEATURES

- + High reliability for low cost
- + All ceramic epoxy sealed SMD package
- + Low profile—1.1 mm max. package height
- + Extended temperature range to -40/+85°C available
- + Excellent clock generator for CPU's, Wireless, Mobile Comm., etc.



ROHS-2 2011/65/EU COMPLIANT

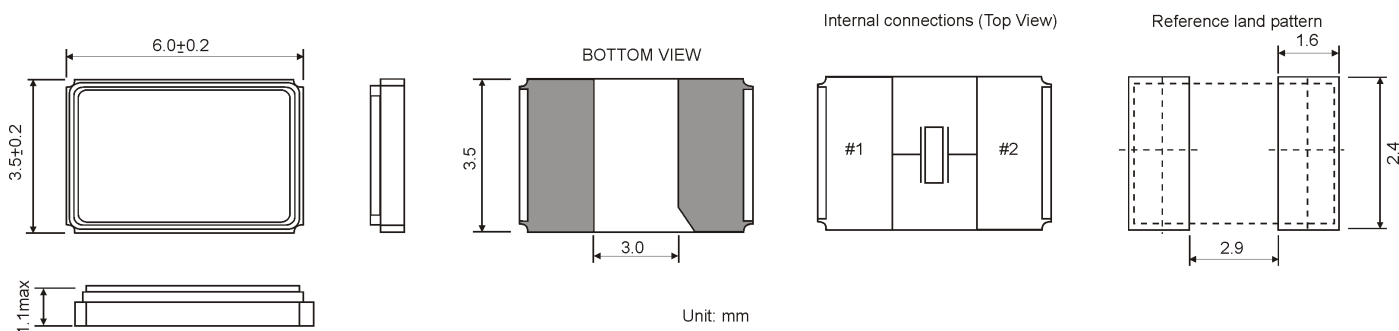
GENERAL DATA

PARAMETERS	PRODUCT FEATURES AND CONDITIONS
SMD-CRYSTAL SERIES	SMD0603/2
NUMBER OF SOLDER PADS	2 Please do not use this package for new design. Please use <u>SMD0603/4</u> for new design.
FREQUENCY RANGE	11.0592 ~ 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 RANGE	0/+50°C ~ -40/+125°C
SHUNT CAPACITANCE (C ₀)	7.0 pF max.
DRIVE LEVEL	0.1 mW max. standard (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	

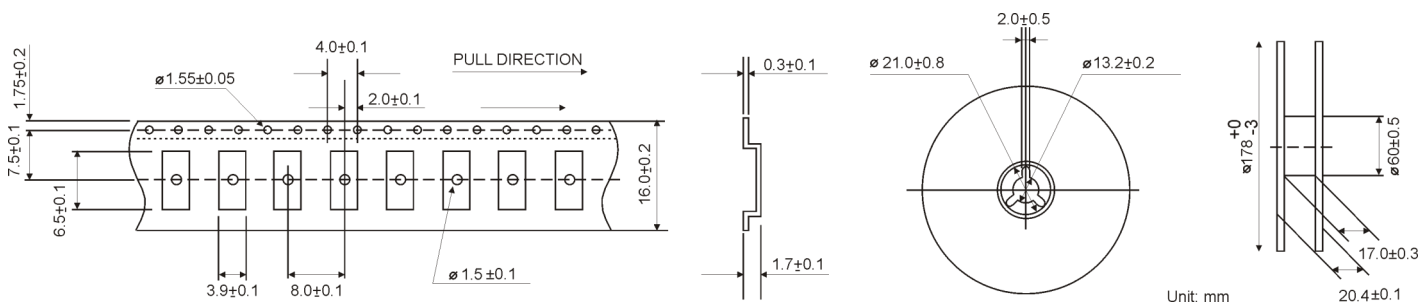
FREQUENCY STABILITY VS. TEMPERATURE

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

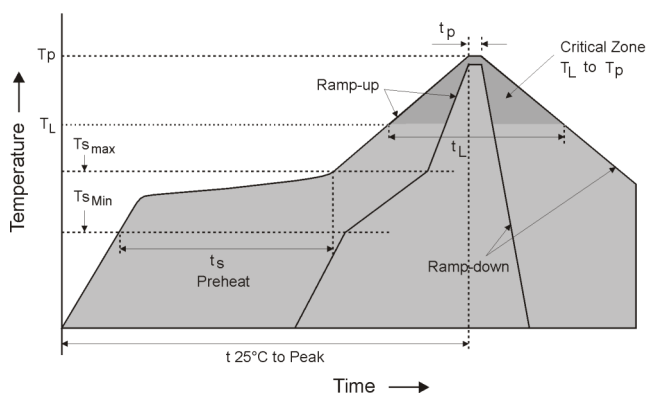
DIMENSIONS OF SMD0603/2



REEL SPECIFICATION



REFLOW SOLDER PROFILE

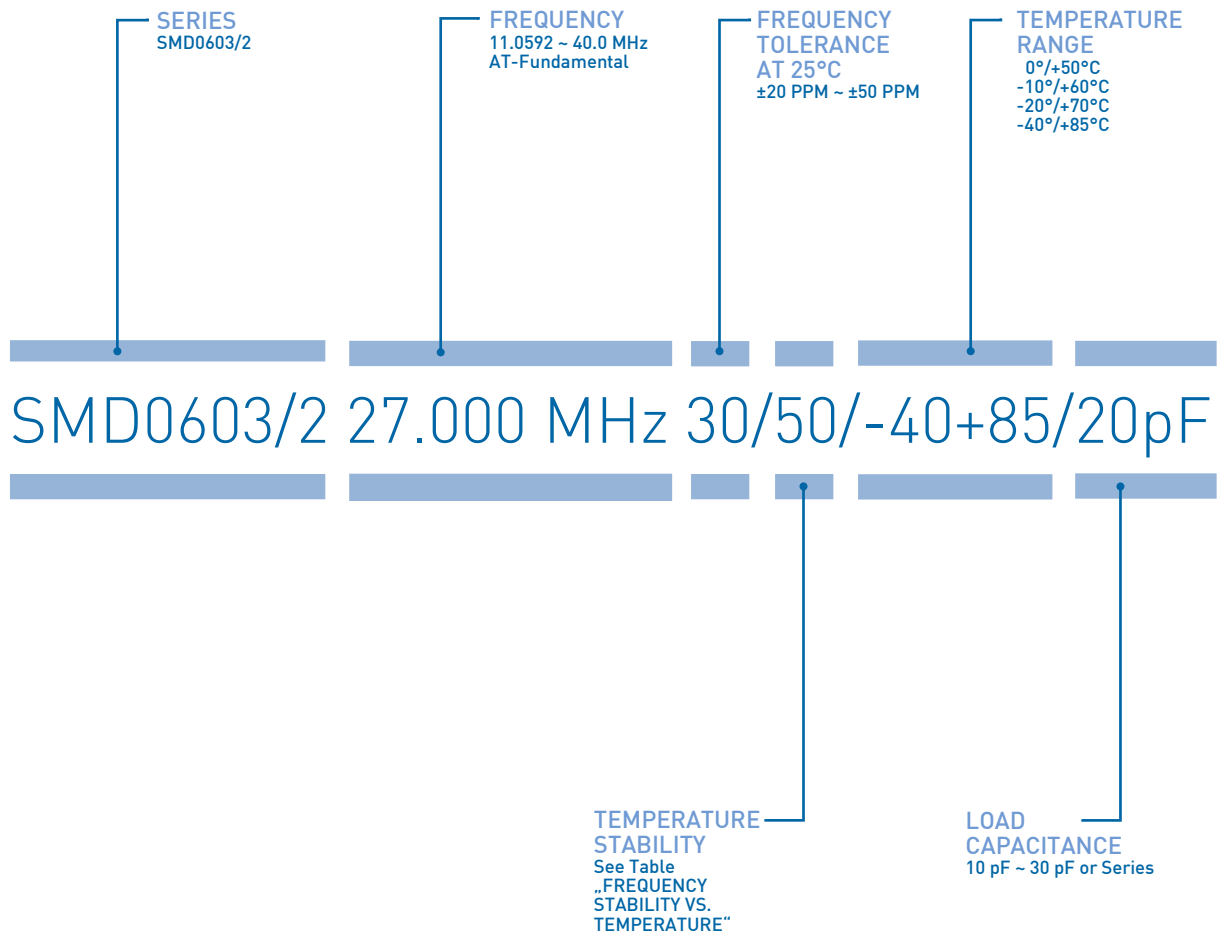


Profile Feature	Pb-Free Assembly
Average ramp-up rate (TL to TP)	3°C/second max.
Preheat:	
Temperature Min (T _{smin})	150°C
Temperature Max (T _{smax})	200°C
Time (min to max) (t _s)	60-180 seconds
Time maintained above:	
Temperature (TL)	217°C
Time (t _L)	60-150 seconds
Peak/Classification Temperature (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.

RESONANCE RESISTANCE

FREQUENCY IN MHz	VIBRATION MODE	ESR MAX. IN Ω
11.0592 ~ 16.0 MHz	AT Fund.	60
16.0 ~ 40.0 MHz	AT Fund.	30

ORDERING INFORMATION



EXAMPLE: SMD0603/2 27.000 MHz 30/50/-40+85/20pF
 PLEASE INDICATE YOUR REQUIRED PARAMETERS



PREMIUM QUALITY BY PETERMANN-TECHNIK



OUR COMPANY IS CERTIFIED ACCORDING TO ISO 9001:2008 IN OCTOBER 2013 BY THE DMSZ CERTIFIKATION GMBH.

THIS IS FOR YOU TO ENSURE THAT THE PRINCIPLES OF QUALITY MANAGEMENT ARE FULLY IMPLEMENTED IN OUR QUALITY MANAGEMENT SYSTEM AND QUALITY CONTROL METHODS ALSO DOMINATE OUR QUALITY STANDARDS.