

SERIES RR1612

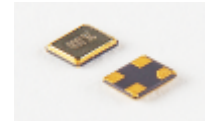


❖ **FEATURES**

- ❖ ULTRA SMALL ULTRA THIN
- ❖ AUTOMATIC MOUNTING POSSIBLE
- ❖ REFLOW POSSIBLE
- ❖ EXCELLENT FOR HIGH DENSITY APPLICATIONS

❖ **SPECIFICATIONS**

PARAMETER	VALUE
FREQUENCY RANGE	24.000 MHz to 60.000 MHz
MODE OF OSCILLATION	AT CUT, Fundamental
FREQUENCY TOLERANCE AT 25°C	±50 ppm max ±10ppm, ±20ppm, ±30 ppm available
FREQUENCY STABILITY OVER TEMPERATURE	±50 ppm max ±10ppm, ±20ppm, ±30 ppm available
OPERATING TEMPERATURE RANGE	-10°C to +60°C Standard -40°C to +85°C Extended
STORAGE TEMPERATURE RANGE	-40°C to +85°C
AGING	±2 ppm per year
LOAD CAPACITANCE	8 pF to 32 pF or Series Resonance
EQUIVALENT SERIES RESISTANCE	See Table 1
SHUNT CAPACITANCE	3.5 pF max
DRIVE LEVEL	50 µW max



FREQUENCY (MHz)	MODE	MAXIMUM ESR (Ω)
24.000 to 40.999	FUND	150
41.000 to 60.000	FUND	100

❖ **PART NUMBERING SYSTEM**

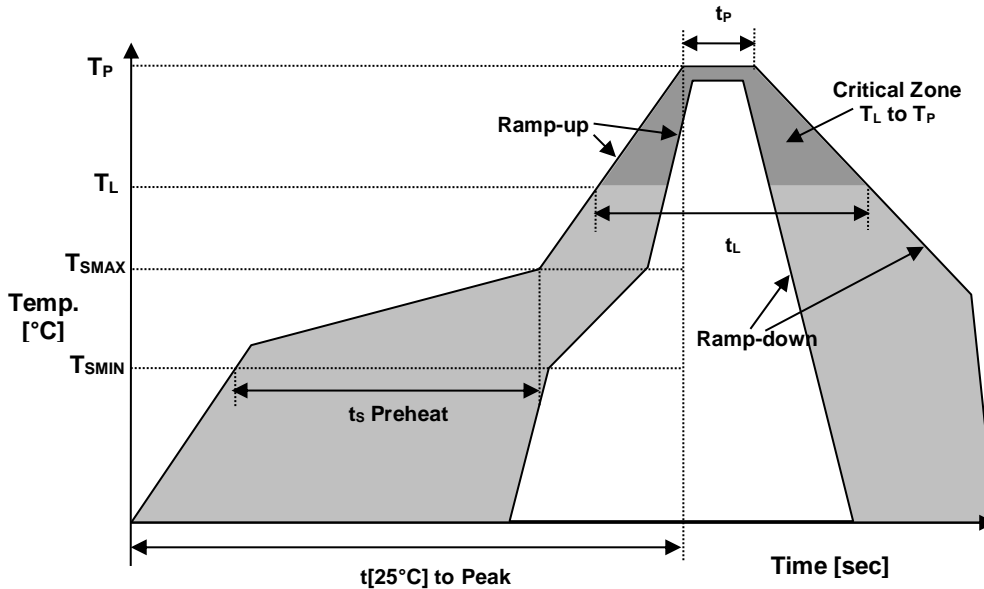
TYPE	-	FREQUENCY	-	LOAD CAPACITANCE	-	MODE	TOLERANCE/STABILITY (PPM/PPM)
RR1612	-	IN MHz	-	8 to 32 pF for PARALLEL S for SERIES	-	Blank for < 24.576 MHz F for ≥ 24.576 MHz	Blank for MAXIMUM PPMPPM for OTHER Example: 1020, 2050

-	TEMPERATURE RANGE	-	TAPE & REEL
-	Blank for STANDARD EXT for EXTENDED	-	TR

EXAMPLE: RR1612-26.000-8-F-1530-TR

Surface Mount Crystal, 1.6 x 1.2 mm, 26.000 MHz, 8 pF Load, Fundamental Mode, ±15 ppm Tolerance, ±30 ppm Stability, from -10°C to +60°C, Tape and reel Packaging

❖ REFLOW PROFILE



Reflow profile		
Temperature Min Preheat	T_{SMIN}	150°C
Temperature Max Preheat	T_{SMAX}	200°C
Time (T_{SMIN} to T_{SMAX})	t_s	60-180 sec.
Temperature	T_L	217°C
Peak Temperature	T_P	260°C
Ramp-up rate	R_{UP}	3°C/sec max.
Ramp-down rate	R_{DOWN}	6°C/sec max.
Time within 5°C of Peak Temperature	t_p	10 sec.
Time $t[25^\circ\text{C}]$ to Peak Temperature	$t[25^\circ\text{C}]$ to Peak	480 sec.
Time	t_L	60-150 sec.

❖ ENVIRONMENTAL

PARAMETER	VALUE
MOISTURE SENSITIVITY LEVEL	1
RoHS	COMPLIANT
REACH SVHC	COMPLIANT
HALOGEN-FREE	COMPLIANT
ESD CLASSIFICATION LEVEL	N/A
TERMINATION FINISH	Au

