

● **FEATURES**

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



● **SPECIFICATIONS**

PARAMETER	VALUE
FREQUENCY RANGE	26.000 MHz TO 60.000 MHz
MODE OF OSCILLATION	AT CUT, FUNDAMENTAL
FREQUENCY TOLERANCE AT 25°C	±15 PPM, or ±30 PPM
FREQUENCY STABILITY OVER TEMPERATURE	±15 PPM, or ±30 PPM
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 or ±5 PPM PER YEAR
LOAD CAPACITANCE	8 pF to 10 pF
EQUIVALENT SERIES RESISTANCE	SEE TABLE 1
SHUNT CAPACITANCE	5.0 pF MAXIMUM
DRIVE LEVEL	50 µW MAX
REFLOW CONDITIONS	260°C ±5°C FOR 10s MAXIMUM

**TABLE 1**

FREQUENCY (MHz)	MODE	MAXIMUM ESR (OHMS)
26.000 TO 40.999	FUND	150
41.000 TO 60.999	FUND	100

■ **PART NUMBERING SYSTEM**

TYPE	-	FREQUENCY	-	LOAD CAPACITANCE	-	MODE	-
R1612	-	IN MHz	-	8 TO 10 pF FOR PARALLEL	-	F	-

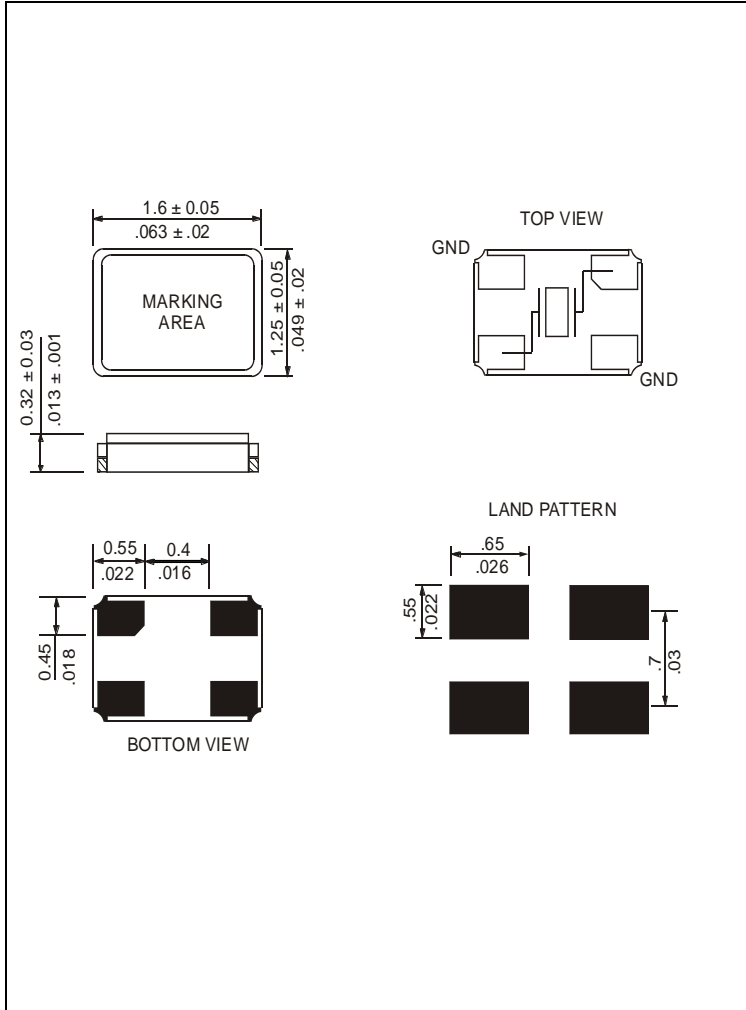
TOLERANCE/STABILITY (PPM/PPM)	-	EXTENDED TEMPERATURE	-	TAPE & REEL
PPMPPM Example: 1020, 2050	-	Blank FOR STANDARD EXT FOR EXTENDED	-	TR

**EXAMPLE: R1612-24.000-8-F-1530-TR**

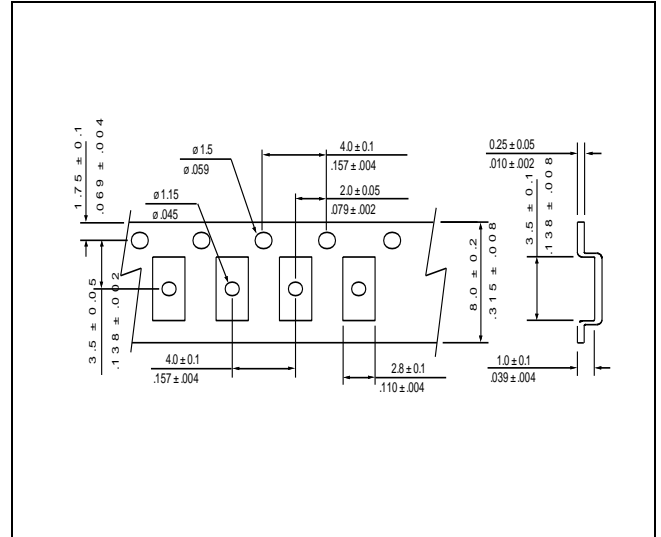
Surface Mount Crystal, 1.6 x 1.2 mm, 24.000 MHz, 8 pF load, Fundamental mode, ±15 ppm Tolerance, ±30 ppm Stability, from -10°C to +60°C, Tape and reel packaging

## SERIES 1612

### MECHANICAL SPECIFICATION



### CARRIER TAPE DIMENSIONS



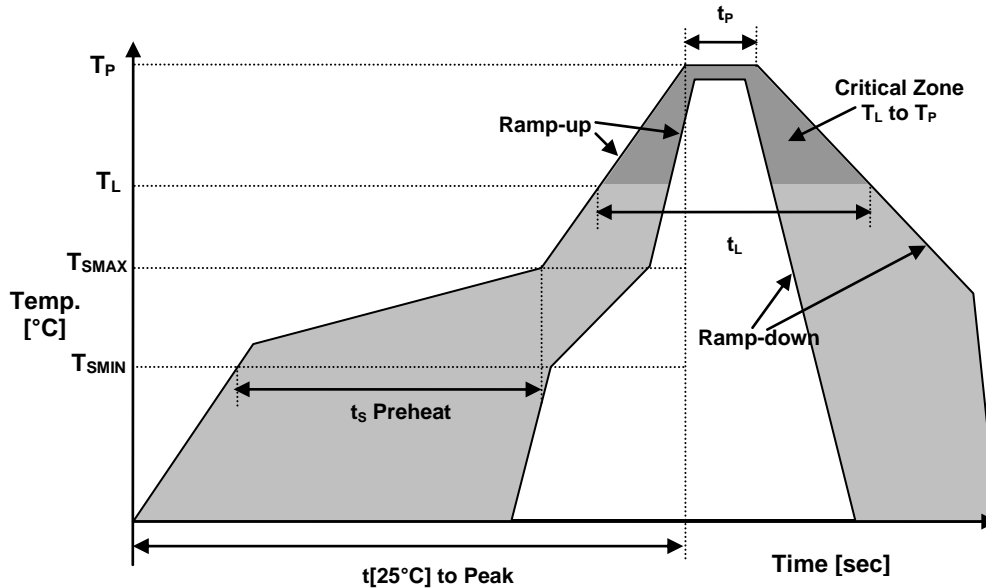
NOTE: REFER TO EIA-481 FOR NON-SPECIFIED DIMENSIONS

### PACKAGING

180 mm REEL DIAMETER  
 8 mm TAPE WIDTH, 4 mm PITCH  
 QUANTITY: 3000 PIECES PER REEL

IN ACCORDANCE WITH EIA-481

● 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	6/6 LEAD FREE
REACH SVHC	COMPLIANT
HALOGEN-FREE	COMPLIANT
ESD CLASSIFICATION LEVEL	N/A
TERMINATION FINISH	Au

