

SERIES H10S

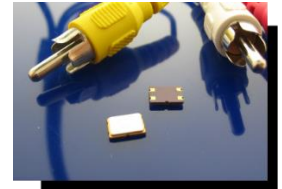


FEATURES

- LOW PROFILE
- HIGH ACCURACY AND STABILITY
- WIDE FREQUENCY RANGE FROM 8.00 MHz to 200.00 MHz

SPECIFICATIONS

PARAMETER	VALUE	
FREQUENCY RANGE*	8.000 MHz to 200.000 MHz	
MODE OF OSCILLATION	FUNDAMENTAL	8.000 MHz to 54.000 MHz
	3rd OVERTONE	40.000 MHz to 200.000 MHz
FREQUENCY TOLERANCE AT 25°C	±100 ppm max ±10ppm, ±20ppm, ±50 ppm available	
FREQUENCY STABILITY OVER TEMPERATURE*	±100 ppm max ±10ppm, ±20ppm, ±50 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 1st year max	
LOAD CAPACITANCE	10 pF to 32 pF or Series Resonance	
EQUIVALENT SERIES RESISTANCE	See Table 1	
SHUNT CAPACITANCE	5.0 pF max	
DRIVE LEVEL	300 µW max	



*Not any Combination Frequency-Operating Temperature Range- Stability is available. Please consult factory

FREQUENCY (MHz)	MODE	MAXIMUM ESR (Ω)
7.000 to 11.900	FUND	100
12.000 to 13.900	FUND	60
14.000 to 54.000	FUND	40
40.000 to 200.000	3rd	80

PART NUMBERING SYSTEM

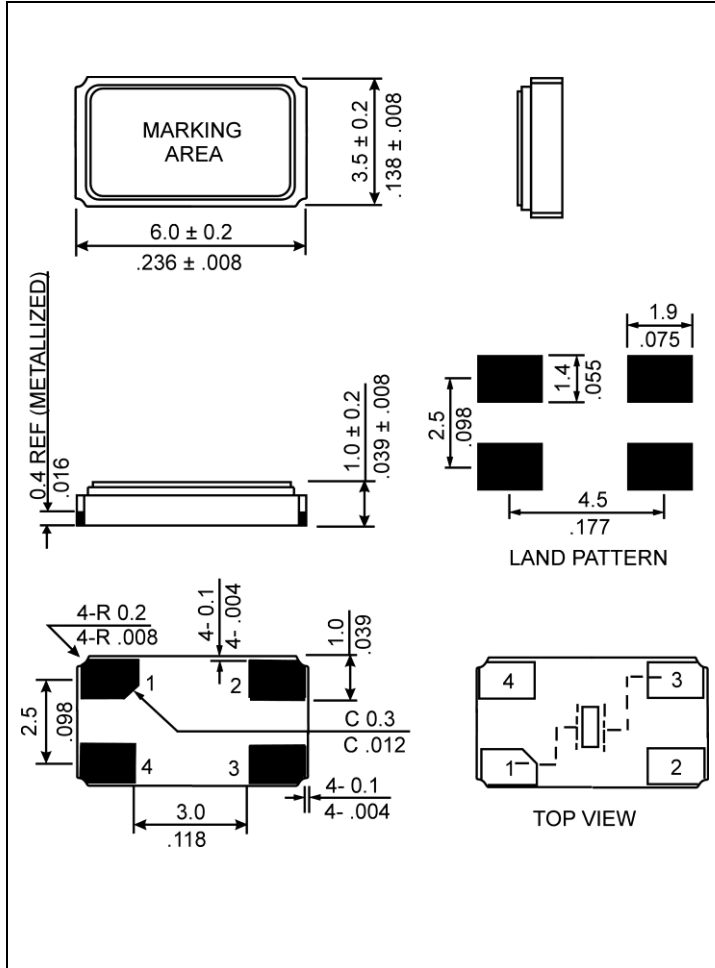
TYPE	-	FREQUENCY	-	LOAD CAPACITANCE	-	MODE	-
H10S	-	IN MHz	-	10 to 32 pF for PARALLEL S for SERIES	-	Blank for < 24.576 MHz F for ≥ 24.576 MHz 3OT THIRD OVERTONE	-

TOLERANCE/STABILITY (PPM/PPM)	-	OPERATING TEMPERATURE	-	TAPE & REEL
Blank for MAXIMUM PPM/PPM for OTHER Example: 1020, 2050	-	Blank for STANDARD EXT for EXTENDED	-	TR

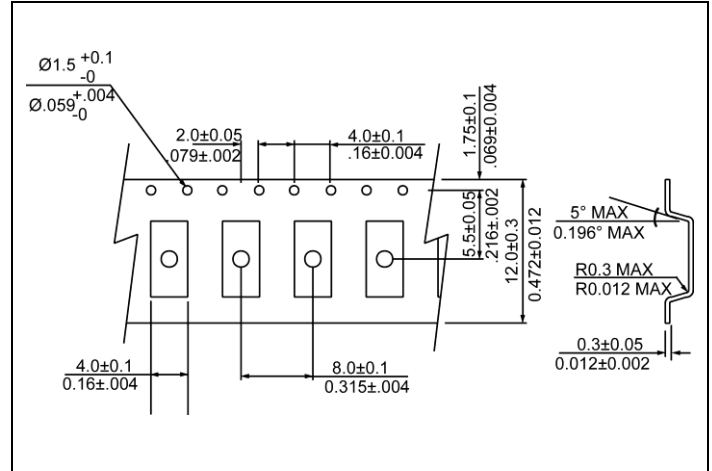
EXAMPLE: H10S-45.000-32-F-3050-TR

Surface Mount Crystal, 6.0 x 3.5 mm, 45.000 MHz, 32 pF Load, Fundamental Mode, ±30 ppm Tolerance, ±50ppm Stability, from -10°C to +60°C, Tape and Reel Packaging

● **MECHANICAL SPECIFICATION**



● **CARRIER TAPE DIMENSIONS**



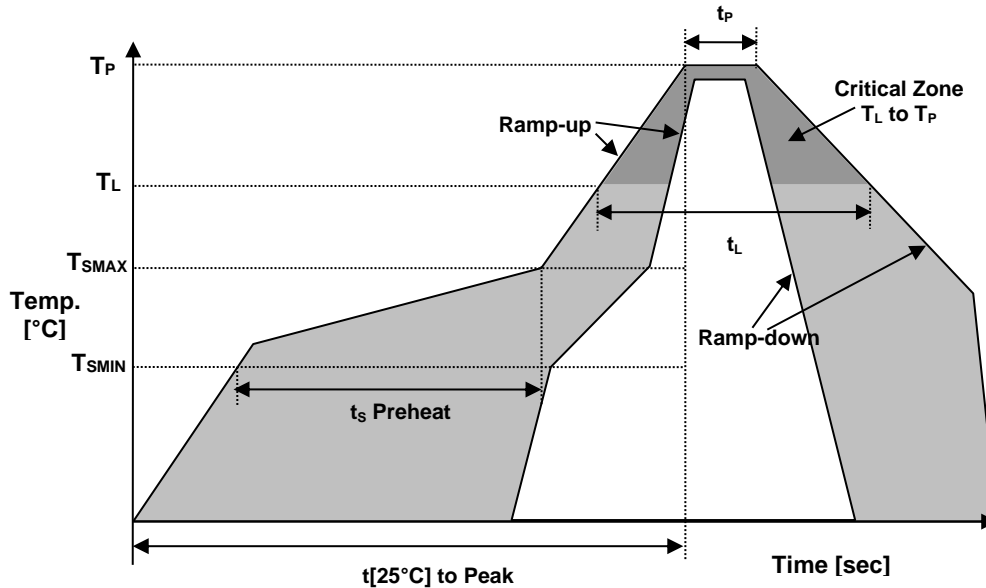
NOTE: REFER TO EIA-481 FOR NON-SPECIFIED DIMENSIONS

● **PACKAGING**

255 mm REEL DIAMETER
12 mm TAPE WIDTH, 8 mm PITCH
QUANTITY: 1000 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	COMPLIANT
REACH SVHC	COMPLIANT
HALOGEN-FREE	COMPLIANT
ESD CLASSIFICATION LEVEL	N/A
TERMINATION FINISH	Au

