

#### ● FEATURES

- SMALL PACKAGE OF 5.0 x 3.2 x 1.0 mm
- EXCELLENT TOLERANCE AND STABILITY
- CUSTOM SPECIFICATIONS AVAILABLE



#### ● SPECIFICATIONS

PARAMETER		VALUE
FREQUENCY RANGE		8.000 MHz TO 150.000 MHz
MODE OF OSCILLATION	FUNDAMENTAL	8.000 MHz TO 50.000 MHz
	THIRD OVERTONE	40.000 MHz TO 150.000 MHz
FREQUENCY TOLERANCE AT 25°C		±50 PPM MAXIMUM (±10, ±20, AND ±30 PPM AVAILABLE)
FREQUENCY STABILITY OVER TEMPERATURE		±50 PPM MAXIMUM (±10, ±20, AND ±30 PPM AVAILABLE)
OPERATING TEMPERATURE RANGE		-20°C TO +70°C STANDARD -40°C TO +85°C EXTENDED <sup>1</sup>
STORAGE TEMPERATURE RANGE		-40°C TO +90°C
AGING		±3 PPM PER YEAR MAXIMUM
LOAD CAPACITANCE		8 pF to 32 pF OR SERIES
EQUIVALENT SERIES RESISTANCE		SEE TABLE 1
SHUNT CAPACITANCE		5.0 pF MAXIMUM
DRIVE LEVEL		100 µW TYP, 300 µW MAX
SHOCK RESISTANCE		±5 PPM MAXIMUM 75 cm DROP TEST IN 3 AXES ONTO A HARD WOOD SURFACE
REFLOW CONDITIONS		260°C ±5°C FOR 10s MAXIMUM



<sup>1</sup> NOTE: NOT ALL STABILITIES ARE AVAILABLE FOR ALL OPERATING TEMPERATURE RANGES. CONTACT FACTORY FOR AVAILABILITY.

TABLE 1

FREQUENCY (MHz)	MODE	MAX ESR (OHMS)
8.00 TO 9.99	FUND	85
10.00 TO 11.99	FUND	60
12.00 TO 15.99	FUND	35
16.00 TO 19.99	FUND	25
20.00 TO 50.00	FUND	20
40.00 TO 59.99	FUND	70
60.00 TO 150.00	3OT	60



### SERIES H130A

#### ■ PART NUMBERING SYSTEM

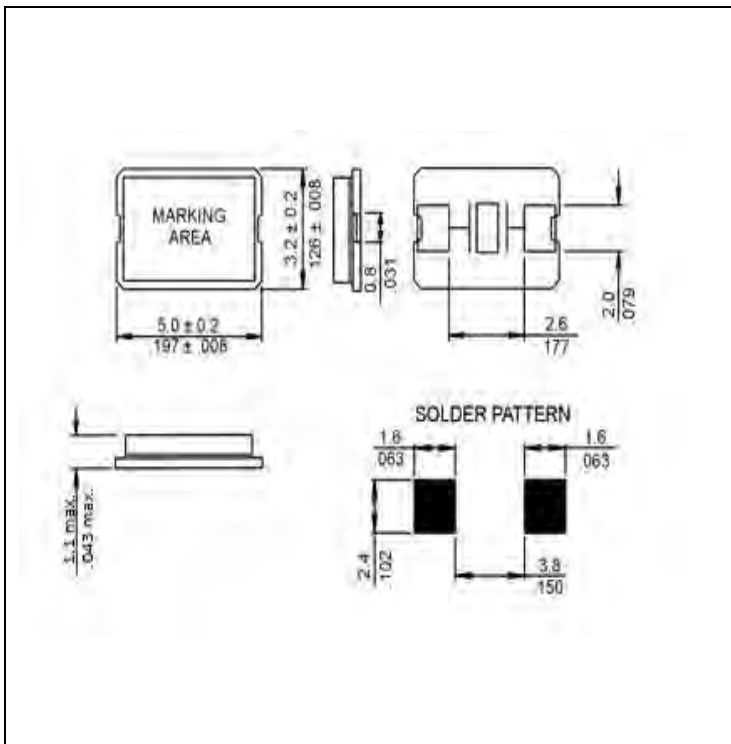
TYPE	FREQUENCY	LOAD CAPACITANCE	MODE	TOLERANCE/STABILITY (PPM/PPM)
H130A	IN MHZ	8 TO 32 pF FOR PARALLEL S FOR SERIES	Blank FOR < 24.576 MHz F FOR ≥ 24.576 MHz 3OT THIRD OVERTONE	Blank FOR MAXIMUM PPM/PPM Example: 1020, 2050

EXTENDED TEMPERATURE	TAPE & REEL
Blank FOR STANDARD EXT FOR EXTENDED	TR

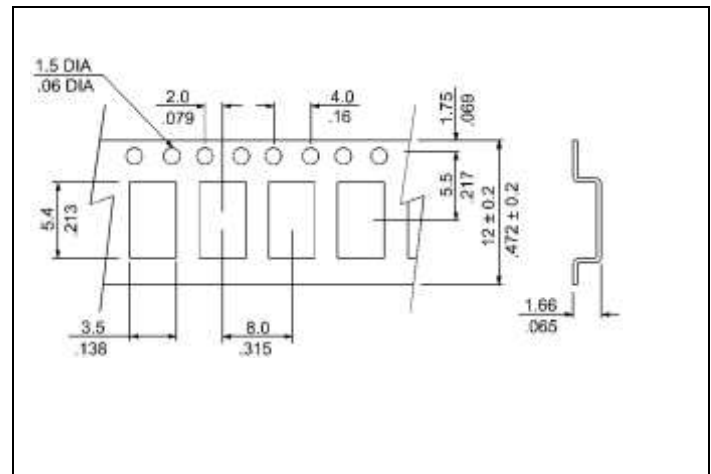
#### EXAMPLE: H130A-24.000-18-TR

Surface Mount Microprocessor Crystal, H130A package, 24.000 MHz, Fundamental mode, 18 pF load, ±50 ppm Tolerance, ±50 ppm Stability, from -20°C to +70°C, Tape and reel packaging

#### ● MECHANICAL SPECIFICATION



#### ● CARRIER TAPE DIMENSIONS



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

#### ● PACKAGING

180 mm REEL DIAMETER  
12 mm TAPE WIDTH, 8 mm PITCH  
QUANTITY: 1000 PIECES PER REEL

IN ACCORDANCE WITH EIA-481