

#### SURFACE MOUNT MICROPROCESSOR CRYSTAL

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#### **SERIES H130B**

# FEATURES

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

#### APPLICATIONS

- PAGERS
- CORDLESS TELEPHONES
- GPS
- BLUETOOTH



# SPECIFICATIONS

PARAMI	TER	VALUE			
FREQUENCY RANGE		8.000 MHz TO 150.000 MHz			
MODE OF OSCILLATION	FUNDAMENTAL	8.000 MHz TO 50.000 MHz			
MODE OF OSCILLATION	THIRD OVERTONE	40.000 MHz TO 150.000 MHz			
FREQUENCY TOLERANCE	ΔT 25°C	±50 PPM MAXIMUM			
TREGOLINOT TOLLIVATIOE	A1 23 0	(±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 1			
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>&</sup>lt;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	3OT	70				
60.00 TO 150.00	3OT	60				



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#### PART NUMBERING SYSTEM

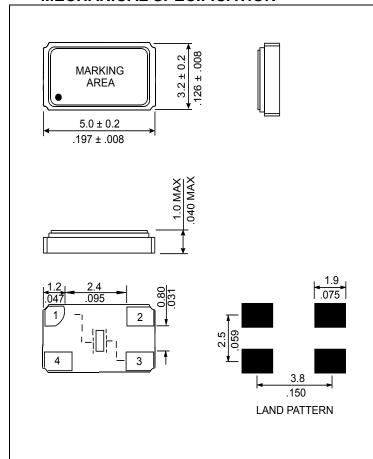
TYPE	-	FREQUENCY	-	LOAD CAPACITANCE	-	MODE	•	TOLERANCE/STABLITY (PPM/PPM)
H130B	i	IN MHz	1	8 TO 32 pF FOR PARALLEL S FOR SERIES	-	Blank FOR < 24.576 MHz F FOR ≥ 24.576 MHz 3OT THIRD OVERTONE		Blank FOR MAXIMUM PPMPPM Example: 1020, 2050

•	EXTENDED TEMPERATURE	ı	TAPE & REEL
-	Blank FOR STANDARD EXT FOR EXTENDED	-	TR

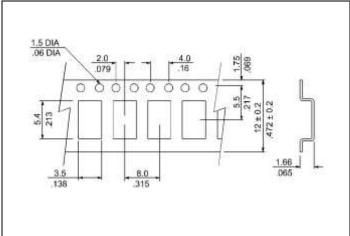
#### EXAMPLE: H130B-24.000-18-TR

Surface Mount Microprocessor Crystal, H130B 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