

● FEATURES

- ISO/TS 16949 CERTIFIED FACILITY
- RELIABILITY TESTING PER AEC-Q200
- PPAP DOCUMENTATION AVAILABLE
- EXCELLENT TOLERANCE AND STABILITY
- CUSTOM SPECIFICATIONS AVAILABLE



■ SPECIFICATIONS

PARAMETER		VALUE
FREQUENCY RANGE		3.000 MHz to 80.000 MHz
MODE OF OSCILLATION	FUNDAMENTAL	3.000 MHz to 48.000 MHz
	THIRD OVERTONE	30.000 MHz to 80.000 MHz
FREQUENCY TOLERANCE AT 25°C		±50 ppm max (±10 ppm, ±15 ppm, ±20 ppm and ±30 ppm available)
FREQUENCY STABILITY OVER TEMPERATURE ‡		±50 ppm max (±10 ppm, ±15 ppm, ±20 ppm and ±30 ppm available, see Table 2)
OPERATING TEMPERATURE RANGE ‡		-20°C to +70°C Standard -40°C to +85°C Extended -40°C to +105°C Extended6
STORAGE TEMPERATURE RANGE		-55°C to +125°C
AGING		±3 ppm per year max
LOAD CAPACITANCE		8 pF to 32 pF or Series
EQUIVALENT SERIES RESISTANCE		See Table 1
SHUNT CAPACITANCE		7.0 pF max
DRIVE LEVEL		100 µW typ, 500 µW max
INSULATION RESISTANCE		500 MΩ min
SHOCK RESISTANCE		±5 ppm max 75 cm drop test in 3 axes onto a hard wood surface
REFLOW CONDITIONS		260°C for 10 s max



‡ Not all combinations of temperature and frequency stability available, consult factory.

TABLE 1

FREQUENCY (MHz)	MODE	ESR MAX (Ω)
3 ≤ F0 < 4	FUND	150
4 ≤ F0 < 6	FUND	100
6 ≤ F0 < 10	FUND	70
10 ≤ F0 < 12	FUND	60
12 ≤ F0 < 16	FUND	50
16 ≤ F0 < 24	FUND	40
24 ≤ F0 < 30	FUND	30
30 ≤ F0 ≤ 48	FUND	20
30 ≤ F0 < 36	3OT	80
36 ≤ F0 ≤ 80	3OT	60

TABLE 2

TEMP RANGE (°C)	STABILITY (ppm)				
	±10	±15	±20	±30	±50
-20 to +70	O	O	O	O	O
-40 to +85	×	△	△	O	O
-40 to +105	×	×	×	×	O

Note: O: Available, △: Conditional, ×: Not available

SERIES ASA-SMD

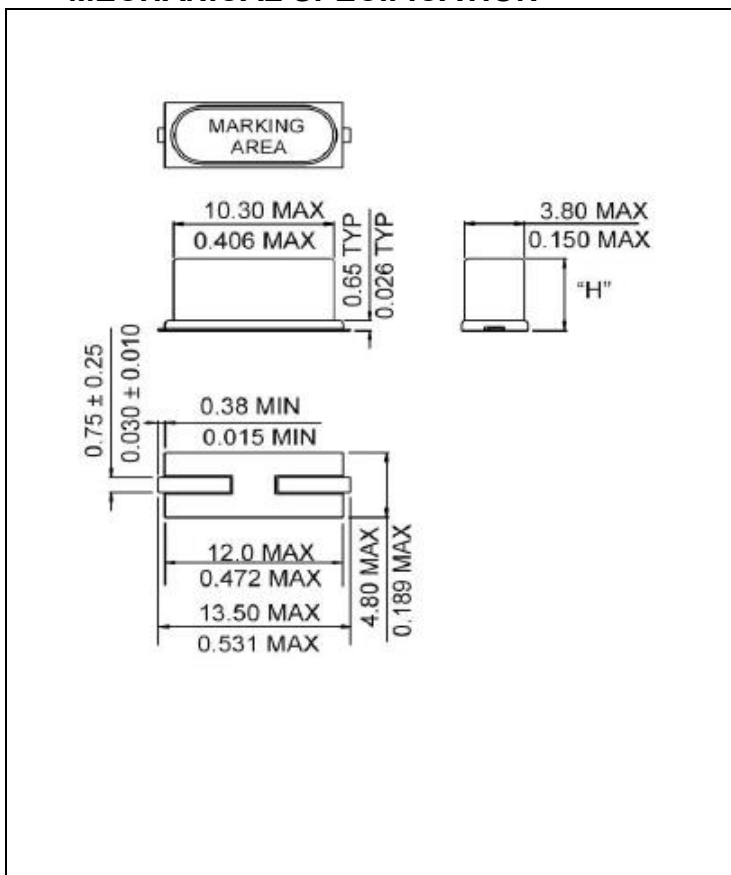
■ PART NUMBERING SYSTEM

TYPE	FREQUENCY	LOAD CAPACITANCE	MODE	TOLERANCE/STABILITY (PPM/PPM)
ASA	in MHz	8 to 32 pF for Parallel S for Series	Blank for < 24.576 MHz F for ≥ 24.576 MHz	Blank for max ppmppm Example: 1020, 2050
EXTENDED TEMPERATURE	CONFIGURATION	TAPE & REEL		
Blank for Standard EXT for Extended EXT6 for Extended6	SMD	TR		

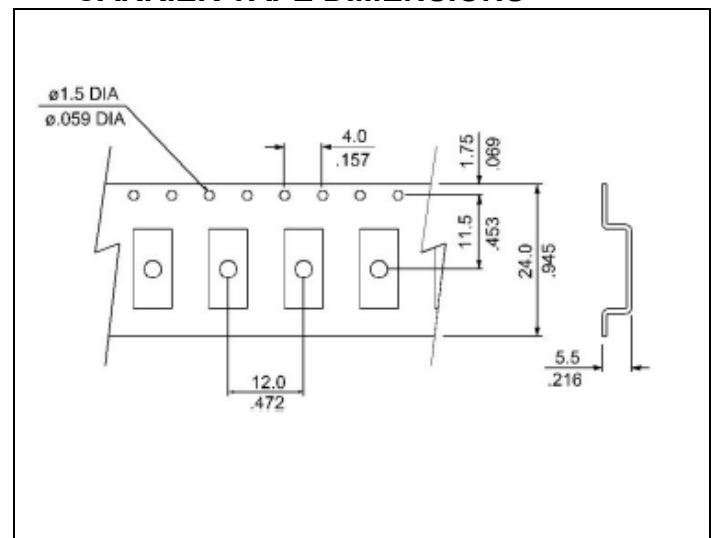
EXAMPLE: ASA-24.000-18-3050-EXT-SMD-TR

AUTOMOTIVE GRADE Surface Mount Microprocessor Crystal, HC-49S SMD package, 24.000 MHz, Fundamental mode, 18 pF Load, ±30 ppm Tolerance, ±50 ppm Stability from -40°C to +85°C , Tape and Reel packaging

■ MECHANICAL SPECIFICATION



■ CARRIER TAPE DIMENSIONS



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

■ PACKAGING

330 mm REEL DIAMETER
24 mm TAPE WIDTH, 12 mm PITCH
QUANTITY: 1000 PIECES PER REEL