

● FEATURES

- EXCELLENT CLOCK SIGNAL GENERATOR FOR CPU's
- AVAILABLE IN EXTENDED TEMPERATURE RANGE
- LOW PROFILE SURFACE MOUNT

SERIES AS-SMD



● SPECIFICATIONS

| | | |
|--|----------------|-------------------------------------|
| FREQUENCY RANGE | | 3.20 MHz TO 70.00 MHz |
| MODE OF OSCILLATION | FUNDAMENTAL | 3.20 MHz TO 40.320 MHz |
| | THIRD OVERTONE | 24.576 MHz TO 70.00 MHz |
| FREQUENCY TOLERANCE AT 25°C | | ±30 PPM TYPICAL ±50 PPM MAXIMUM |
| FREQUENCY STABILITY OVER TEMPERATURE RANGE | | ±50 PPM TYPICAL ±100 PPM MAXIMUM |
| OPERATING TEMPERATURE RANGE | | -20° C TO +70° C STANDARD |
| | | -40° C TO +85° C EXTENDED |
| STORAGE TEMPERATURE RANGE | | -55° C TO +125° C |
| AGING | | ±5 PPM PER YEAR MAXIMUM |
| LOAD CAPACITANCE | | 10 pF TO 32 pF OR SERIES |
| EQUIVALENT SERIES RESISTANCE (ESR) | | SEE TABLE |
| DRIVE LEVEL | | 0.1 mW TYPICAL |
| REFLOW CONDITIONS | | 260° C FOR 10 s MAXIMUM |



● TYPICAL FREQUENCIES AND ESR CHARACTERISTICS

| FREQUENCY (MHz) | ESR MAX (OHM) | MODE | FREQUENCY (MHz) | ESR MAX (OHM) | MODE | FREQUENCY (MHz) | ESR MAX (OHM) | MODE | FREQUENCY (MHz) | ESR MAX (OHM) | MODE |
|-----------------|---------------|------|-----------------|---------------|------|-----------------|---------------|----------|-----------------|---------------|------|
| 3.579545 | 180 | FUND | 8.064 | 60 | FUND | 14.7456 | 50 | FUND | 47.920 | 70 | 3OT |
| 3.6864 | 150 | FUND | 8.192 | 60 | FUND | 16.000 | 40 | FUND | 48.000 | 70 | 3OT |
| 4.000 | 130 | FUND | 8.6436 | 60 | FUND | 16.000312 | 40 | FUND | 50.688 | 70 | 3OT |
| 4.032 | 130 | FUND | 9.600 | 60 | FUND | 16.384 | 40 | FUND | 52.416 | 70 | 3OT |
| 4.096 | 130 | FUND | 9.8304 | 60 | FUND | 19.6608 | 40 | FUND | 56.448 | 70 | 3OT |
| 4.194304 | 130 | FUND | 10.000 | 50 | FUND | 20.000 | 40 | FUND | 60.000 | 70 | 3OT |
| 4.433619 | 130 | FUND | 10.240 | 50 | FUND | 24.000 | 40 | FUND | 70.000 | 70 | 3OT |
| 4.9152 | 130 | FUND | 10.244 | 50 | FUND | 24.576 | 40/80 | FUND/3OT | | | |
| 5.0688 | 100 | FUND | 10.245 | 50 | FUND | 27.000 | 40/80 | FUND/3OT | | | |
| 6.000 | 80 | FUND | 11.000 | 50 | FUND | 28.63636 | 40/80 | FUND/3OT | | | |
| 6.144 | 80 | FUND | 11.0592 | 50 | FUND | 29.000 | 40/70 | FUND/3OT | | | |
| 6.176 | 80 | FUND | 11.2896 | 50 | FUND | 32.000 | 40/70 | FUND/3OT | | | |
| 7.15909 | 70 | FUND | 12.000 | 50 | FUND | 32.768 | 40/70 | FUND/3OT | | | |
| 7.3728 | 70 | FUND | 12.288 | 50 | FUND | 36.000 | 40/70 | FUND/3OT | | | |
| 7.680 | 70 | FUND | 12.800 | 50 | FUND | 40.000 | 40/70 | FUND/3OT | | | |
| 8.000 | 60 | FUND | 14.31818 | 50 | FUND | 40.320 | 40/70 | FUND/3OT | | | |

● PART NUMBERING SYSTEM

| HOLDER TYPE | | FREQUENCY | LOAD CAPACITANCE | MODE* |
|-------------|-------------|-----------|--|---|
| AS | HC-49 SHORT | IN MHz | 10 TO 32 pF FOR PARALLEL S FOR SERIES | F 3OT FUNDAMENTAL THIRD OVERTONE |

| TOLERANCE/STABILITY** | EXTENDED TEMPERATURE | CONFIGURATION | | HEIGHT** | TAPE AND REEL |
|-----------------------------------|----------------------|---------------|----------|--|---------------|
| (PPM/PPM) EXAMPLES: 1020, 1010 | EXT | SMD | SMD TYPE | STD 4.6 mm (STANDARD) H32 3.2 mm (CUSTOM) H30 3.0 mm (CUSTOM) H25 2.5 mm (CUSTOM) | TR |

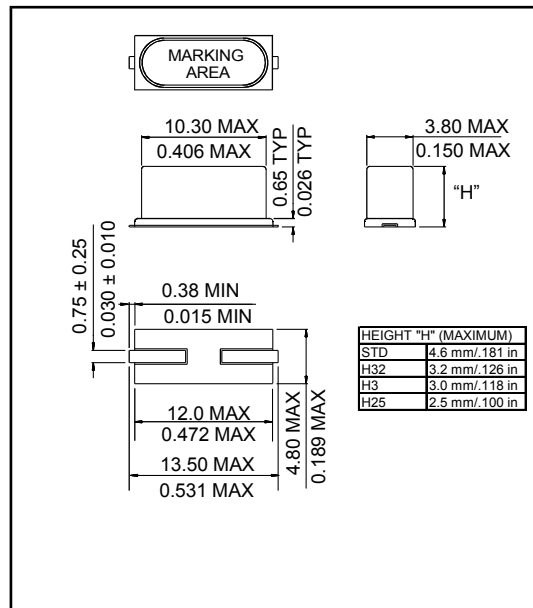
* ONLY FOR FREQUENCIES OVER 24.576 MHz

** INCLUDED IN THE PART NUMBER ONLY IF DIFFERENT FROM THE STANDARD.

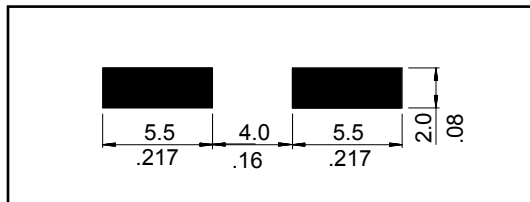
EXAMPLES: AS-10.000-20-F-SMD-TR, AS-32.000-18-3OT-1010-EXT-SMD-H30-TR

NOTE: QUANTITIES UNDER 1,000 PIECES ARE SHIPPED IN BULK.

● **OUTLINE DRAWING**

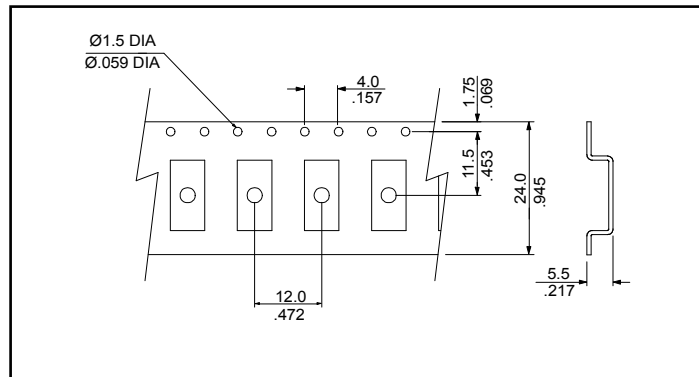


● **RECOMMENDED SOLDER PATTERN**



● **CARRIER TAPE DIMENSIONS**

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



● **REFLOW SOLDERING PROFILE**

