

### SERIES H13

- **FEATURES**
  - LOW PROFILE
  - TIGHT TOLERANCE AND STABILITY TO  $\pm 10$  PPM
  - WIDE FREQUENCY RANGE

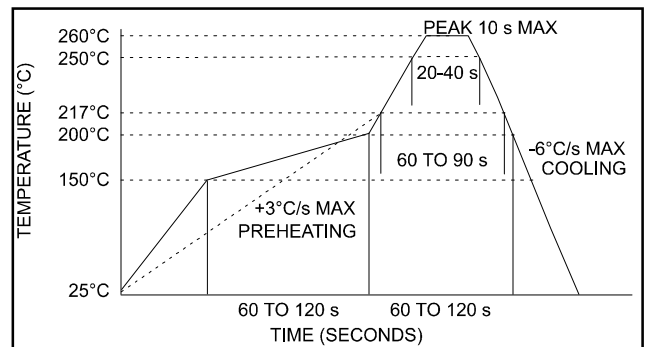
- **SPECIFICATIONS**

|                                      |   |
|--------------------------------------|---|
| FREQUENCY RANGE                      | 6.00 MHz TO 100.00 MHz  |
| MODE OF OSCILLATION                  | (6.00 TO 50.00 MHz) FUNDAMENTAL<br>(40.00 TO 100.00 MHz) THIRD OVERTONE |
| FREQUENCY TOLERANCE AT 25°C          | $\pm 50$ PPM MAXIMUM ( $\pm 10$ PPM, $\pm 30$ PPM AVAILABLE)            |
| FREQUENCY STABILITY OVER TEMPERATURE | $\pm 50$ PPM MAXIMUM ( $\pm 10$ PPM, $\pm 30$ PPM AVAILABLE)            |
| OPERATING TEMPERATURE RANGE          | -10°C TO +60°C STANDARD<br>-30°C TO +85°C EXTENDED                      |
| STORAGE TEMPERATURE RANGE            | -40°C TO +85°C  |
| AGING                                | $\pm 5$ PPM PER YEAR MAX.   |
| LOAD CAPACITANCE                     | 12 pF TO 32 pF OR SERIES  |
| EQUIVALENT SERIES RESISTANCE (ESR)   | SEE TABLE   |
| SHUNT CAPACITANCE                    | 7.0 pF MAXIMUM  |
| DRIVE LEVEL                          | 1 $\mu$ W TO 100 $\mu$ W  |
| REFLOW CONDITIONS                    | 260° C FOR 10 s MAX 2 REFLAWS MAX                                       |

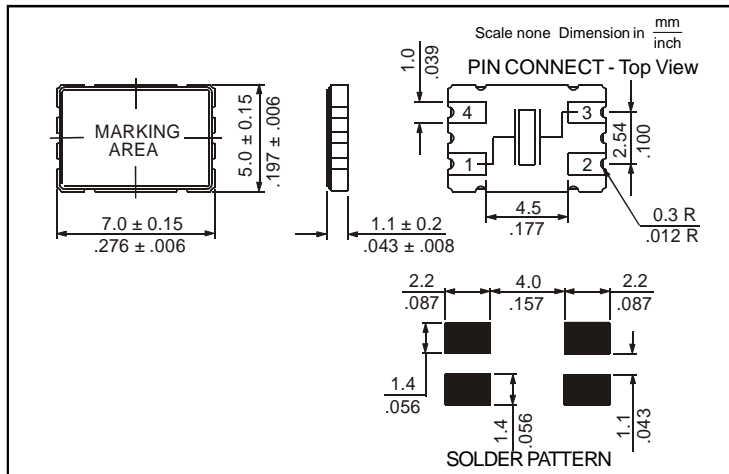


| FREQUENCY (FUND) | ESR (OHM) MAX | FREQUENCY (FUND) | ESR (OHM) MAX | FREQUENCY (3OT) | ESR (OHM) MAX |
|------------------|---------------|------------------|---------------|-----------------|---------------|
| 6.00             | 100           | 23.040           | 35            | 40.00           | 65            |
| 7.60             | 60            | 24.00            | 35            | 40.320          | 65            |
| 8.00             | 60            | 24.576           | 35            | 44.2368         | 65            |
| 10.00            | 60            | 27.00            | 35            | 52.416          | 65            |
| 12.288           | 60            | 28.00            | 35            | 56.448          | 65            |
| 14.31818         | 45            | 28.63636         | 35            | 66.667          | 65            |
| 14.7456          | 45            | 29.4912          | 35            | 70.00           | 65            |
| 15.00            | 45            | 32.00            | 35            | 80.00           | 65            |
| 15.360           | 45            | 36.00            | 35            | 90.00           | 65            |
| 16.00            | 35            | 40.00            | 35            | 92.00           | 65            |
| 16.9344          | 35            | 40.320           | 35            | 98.304          | 65            |
| 18.432           | 35            | 48.00            | 35            | 100.00          | 65            |
| 19.6608          | 35            | 49.152           | 35            |                 |               |
| 20.00            | 35            | 50.00            | 35            |                 |               |

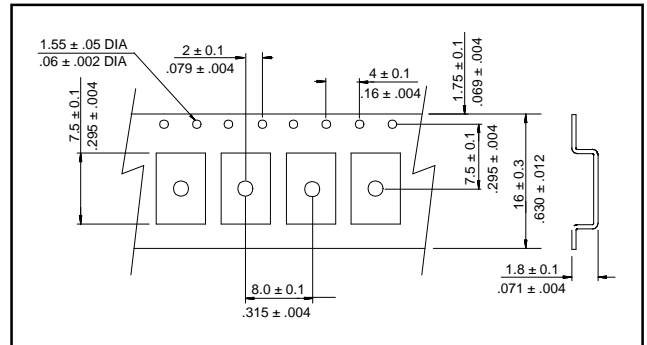
- **SOLDER REFLOW PROFILE**



- **OUTLINE DRAWING**



- **CARRIER TAPE DIMENSIONS**



- **PACKAGING**

255mm REEL DIAMETER  
16mm TAPE WIDTH, 8mm PITCH  
QUANTITY: 1000 PIECES PER REEL

- **PART NUMBERING SYSTEM**

| HOLDER TYPE | FREQUENCY | LOAD CAPACITANCE                         | MODE     |                               | TOLERANCE / STABILITY             | EXTENDED TEMPERATURE | TAPE AND REEL |
|-------------|-----------|--|----------|-------------------------------|-----------------------------------|----------------------|---------------|
| H13         | IN MHz    | 12 TO 32 pF FOR PARALLEL<br>S FOR SERIES | F<br>3OT | FUNDAMENTAL<br>THIRD OVERTONE | (PPM/PPM)<br>EXAMPLES: 1030, 3030 | EXT                  | TR            |

EXAMPLE: H13-32.000-18-1030-EXT-TR