

### FEATURES

- AT CUT CRYSTAL PERFORMANCE
- THERMOPLASTIC PACKAGE SUITED FOR REFLOW SOLDERING
- EXCELLENT FOR HIGH DENSITY CIRCUIT BOARDS

### SPECIFICATIONS

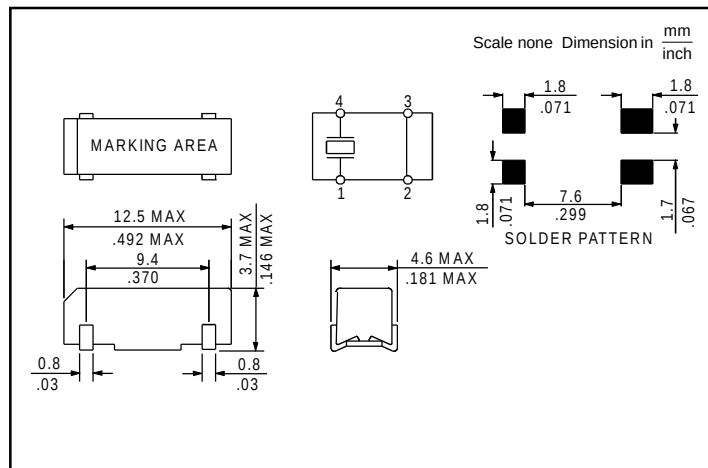
|                                      |                                                                                                      |                            |
|--------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------|
| MODEL TYPE                           | TT-SMDC                                                                                              |                            |
| FREQUENCY RANGE                      | 3.579545 MHz TO 70.000 MHz                                                                           |                            |
| MODE OF OSCILLATION                  | FUNDAMENTAL                                                                                          | 3.579545 MHz TO 30.000 MHz |
|                                      | THIRD OVERTONE                                                                                       | 30.10 MHz TO 70.000 MHz    |
| FREQUENCY TOLERANCE AT 25 C          | ±50 PPM MAX (±30 PPM AVAILABLE)                                                                      |                            |
| FREQUENCY STABILITY OVER TEMPERATURE | ±50 PPM MAX (±30 PPM AVAILABLE)                                                                      |                            |
| TEMPERATURE RANGE                    | OPERATING                                                                                            | -10 C TO +60 C             |
|                                      | EXTENDED                                                                                             | -40 C TO +85 C             |
| LOAD CAPACITANCE                     | 12 pF TO 32 pF OR SERIES                                                                             |                            |
| SHUNT CAPACITANCE                    | 7 pF MAXIMUM                                                                                         |                            |
| EQUIVALENT SERIES RESISTANCE (ESR)   | SEE TABLE 1                                                                                          |                            |
| DRIVE LEVEL                          | 100 W MAXIMUM                                                                                        |                            |
| SHOCK RESISTANCE                     | ±5 PPM MAXIMUM 75 cm DROP TEST IN 3 AXES ONTO A HARD SURFACE OR 3000 g/0.3 ms x % SINEWAVE IN 3 AXES |                            |
| REFLOW CONDITIONS                    | 240 C FOR 10 S MAXIMUM                                                                               |                            |



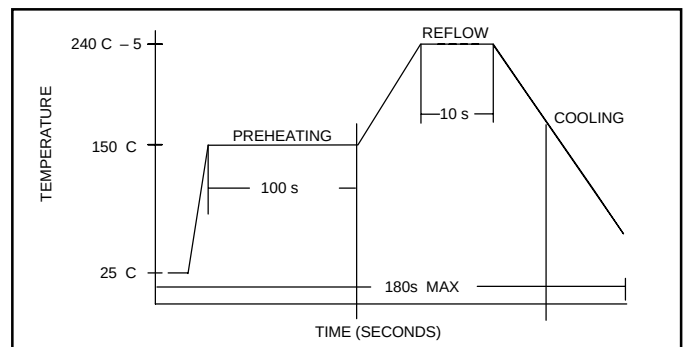
TABLE 1

| FREQUENCY (MHz) | MODE           | MAXIMUM ESR (OHM) |
|-----------------|----------------|-------------------|
| 3.50 TO 3.999   | FUNDAMENTAL    | 200               |
| 4.00 TO 5.999   | FUNDAMENTAL    | 150               |
| 6.00 TO 9.999   | FUNDAMENTAL    | 100               |
| 10.00 TO 30.00  | FUNDAMENTAL    | 50                |
| 30.10 TO 90.00  | THIRD OVERTONE | 100               |

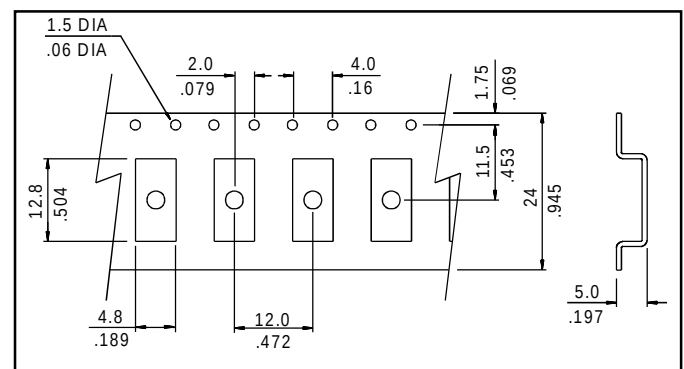
### OUTLINE DRAWINGS



### REFLOW SOLDERING PROFILE



### CARRIER TAPE DIMENSIONS



### PACKAGING

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

### PART NUMBERING SYSTEM

| HOLDER TYPE | FREQUENCY | LOAD CAPACITANCE                         | MODE     |                               | TAPE AND REEL |
|-------------|-----------|------------------------------------------|----------|-------------------------------|---------------|
| TT-SMDC     | IN MHz    | 12 TO 32 pF FOR PARALLEL<br>S FOR SERIES | F<br>3OT | FUNDAMENTAL<br>THIRD OVERTONE | TR            |

EXAMPLE: TT-SMDC-12.288-22-TR