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### RH100-27.000-18-F-2050-EXT1-TR-NS2

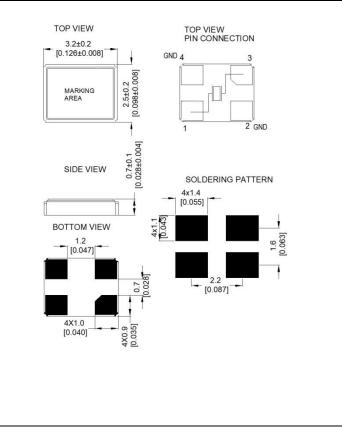
## • SPECIFICATIONS

| PARAMETER                            | VALUE               |
|--------------------------------------|---------------------|
| NOMINAL FREQUENCY                    | 27.000 MHz          |
| MODE OF OSCILLATION                  | Fundamental         |
| FREQUENCY TOLERANCE AT 25°C          | ±20 ppm max         |
| FREQUENCY STABILITY OVER TEMPERATURE | ±50 ppm max         |
| OPERATING TEMPERATURE RANGE          | -40°C to +125°C     |
| STORAGE TEMPERATURE RANGE            | -40°C to +125°C     |
| AGING                                | ±2 ppm per year max |
| LOAD CAPACITANCE                     | 18 pF               |
| EQUIVALENT SERIES RESISTANCE         | 40 Ω max 🗢          |
| SHUNT CAPACITANCE                    | 3.5 pF max          |
| DRIVE LEVEL                          | 300 µW max          |

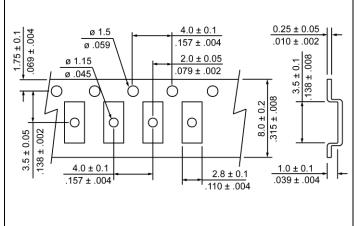


Photo is not actual part

## MECHANICAL SPECIFICATION



## • CARRIER TAPE DIMENSIONS



NOTE: REFER TO EIA-481 FOR DIMENSIONS

PACKAGING

178 mm REEL DIAMETER 8 mm TAPE WIDTH, 4 mm PITCH QUANTITY: 3000 PIECES PER REEL

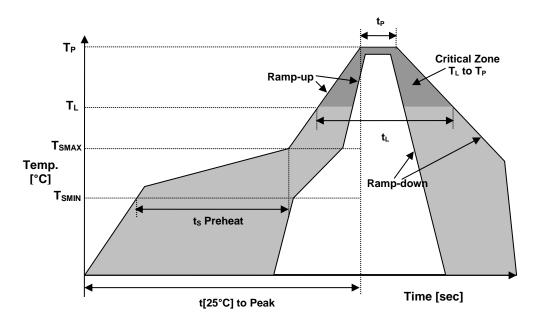
IN ACCORDANCE WITH EIA-481



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## RH100-27.000-18-F-2050-EXT1-TR-NS2

# • REFLOW PROFILE



| Reflow profile                                  |                   |              |  |  |
|---|-------------------|--------------|--|--|
| Temperature Min Preheat T <sub>SMIN</sub> 125°C |                   |              |  |  |
| Temperature Max Preheat                         | T <sub>SMAX</sub> | 150°C        |  |  |
| Time (T <sub>SMIN</sub> to T <sub>SMAX</sub> )  | ts                | 60-180 sec.  |  |  |
| Temperature                                     | TL                | 217°C        |  |  |
| Peak Temperature                                | T <sub>P</sub>    | 260°C        |  |  |
| Ramp-up rate                                    | R <sub>UP</sub>   | 3°C/sec max. |  |  |
| Ramp-down rate                                  | R <sub>DOWN</sub> | 6°C/sec max. |  |  |
| Time within 5°C of Peak Temperature             | t <sub>P</sub>    | 10 sec.      |  |  |
| Time t[25°C] to Peak Temperature                | t[25°C] to Peak   | 480 sec.     |  |  |
| Time  | tL                | 60-150 sec.  |  |  |

## ENVIRONMENTAL

| PARAMETER                  | VALUE     |
|----------------------------|-----------|
| MOISTURE SENSITIVITY LEVEL | 1         |
| RoHS                       | Compliant |
| REACH SVHC                 | Compliant |
| HALOGEN-FREE               | Compliant |
| ESD CLASSIFICATION LEVEL   | N/A       |
| TERMINATION FINISH         | Au        |





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## RH100-27.000-18-F-2050-EXT1-TR-NS2

### MARKING

R27.000 xxBDyw

- x Internal Production ID code
- y Year code
- w Week code

| YEAR CODE |      |
|-----------|------|
| Year      | Code |
| 2017      | 7    |
| 2018      | 8    |
| 2019      | 9    |
| 2020      | 0    |
| 2021      | 1    |
| 2022      | 2    |
| 2023      | 3    |
| 2024      | 4    |
| 2025      | 5    |

|      | ALPHA WEEK CODE TABLE |      |      |      |      |
|------|-----------------------|------|------|------|------|
| Week | Code                  | Week | Code | Week | Code |
| 1    | а                     | 19   | s    | 37   | K    |
| 2    | b                     | 20   | t    | 38   | L    |
| 3    | с                     | 21   | u    | 39   | М    |
| 4    | d                     | 22   | v    | 40   | Ν    |
| 5    | e                     | 23   | w    | 41   | 0    |
| 6    | f                     | 24   | х    | 42   | Р    |
| 7    | g                     | 25   | У    | 43   | Q    |
| 8    | h                     | 26   | z    | 44   | R    |
| 9    | i                     | 27   | А    | 45   | S    |
| 10   | j                     | 28   | В    | 46   | Т    |
| 11   | k                     | 29   | С    | 47   | U    |
| 12   | 1                     | 30   | D    | 48   | V    |
| 13   | m                     | 31   | E    | 49   | W    |
| 14   | n                     | 32   | F    | 50   | Х    |
| 15   | 0                     | 33   | G    | 51   | Y    |
| 16   | р                     | 34   | Н    | 52   | Z    |
| 17   | q                     | 35   | Ι    |      |      |
| 18   | r                     | 36   | J    |      |      |

#### APPROVAL

| DRAWN BY    | CP, May 26, 2020   |  |
|-------------|--------------------|--|
| APPROVED BY | JI, May 26, 2020   |  |
| REVISION    | A, Initial Release |  |

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