

# DATA SHEET

## GAS DISCHARGE TUBES TELEPHONE INTERFACE

B32-HT series

RoHS compliant & free



Product specification— February 09, 2026 V.1





## Electrical Characteristics

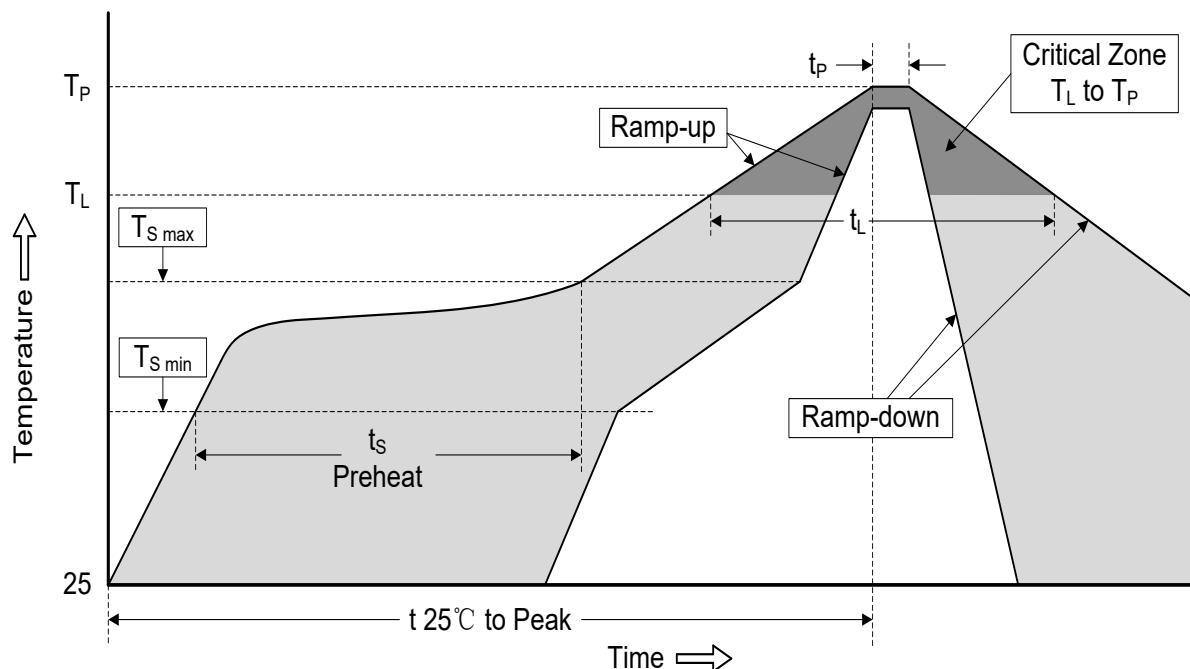
| Part Number   | DC Spark-over Voltage | Maximum Impulse Spark-over Voltage | Minimum Insulation Resistance |               | Maximum Capacitance | Nominal Impulse Discharge Current | Impulse Withstanding Voltage Capacity | Device Marking Code |
|---------------|-----------------------|------------------------------------|-------------------------------|---------------|---------------------|-----------------------------------|---------------------------------------|---------------------|
|               | 100V/s                | 1000V/ $\mu$ s                     | Test Voltage                  | (G $\Omega$ ) | (1MHz)              | 8/20 $\mu$ s<br>10 Times          | 10/700 $\mu$ s<br>10 Times            |                     |
|               | (V)                   | (V)                                | DC(V)                         |               | (pF)                | (A)                               | (KV)                                  |                     |
| B32-150-LF-HT | 150 $\pm$ 30%         | 750                                | 50                            | 1             | 0.5                 | 500                               | 4                                     | None                |
| B32-230-LF-HT | 230 $\pm$ 30%         | 950                                | 100                           | 1             | 0.5                 | 500                               | 4                                     | None                |
| B32-300-LF-HT | 300 $\pm$ 30%         | 1000                               | 100                           | 1             | 0.5                 | 500                               | 4                                     | None                |
| B32-350-LF-HT | 350 $\pm$ 30%         | 1100                               | 100                           | 1             | 0.5                 | 500                               | 4                                     | None                |
| B32-400-LF-HT | 400 $\pm$ 30%         | 1100                               | 100                           | 1             | 0.5                 | 500                               | 4                                     | None                |
| B32-420-LF-HT | 420 $\pm$ 30%         | 1200                               | 100                           | 1             | 0.5                 | 500                               | 4                                     | None                |
| B32-470-LF-HT | 470 $\pm$ 30%         | 1200                               | 100                           | 1             | 0.5                 | 500                               | 4                                     | None                |

## Electrical Ratings

| Items                              | Test Condition/Description                                                                                                                     | Requirement                 |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| DC Spark-over Voltage              | The voltage is measured with voltage ramp $dv/dt=100V/s$ .                                                                                     | To meet the specified value |
| Maximum Impulse Spark-over Voltage | The maximum impulse spark-over voltage is measured with voltage ramp $dv/dt=1000V/\mu s$ .                                                     |                             |
| Insulation Resistance              | The resistance of gas tube shall be measured between two electrodes.                                                                           |                             |
| Capacitance                        | The capacitance of gas tube shall be measured between two electrodes. Test frequency: 1MHz                                                     |                             |
| Impulse Discharge Current          | Maximum 8/20 $\mu s$ surge current that can be applied between two electrodes, 5 positive and 5 negative surges, with 3 minutes interval time. |                             |
| Impulse Withstanding Voltage       | The maximum 10/700 $\mu s$ surge that can be applied to the Gas Tube, 5 positive and 5 negative surges, with 1 minute interval time.           |                             |

## Recommended Soldering Conditions

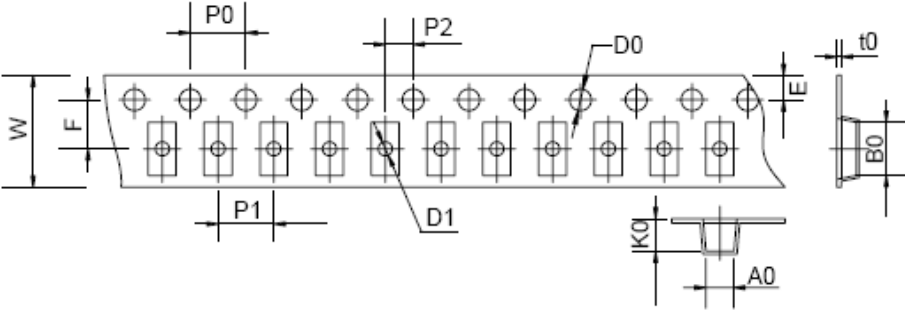
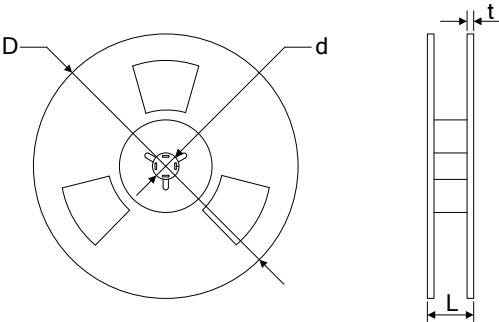
### Reflow Soldering



### Recommended Conditions

| Profile Feature                                      | Pb-Free Assembly |
|------------------------------------------------------|------------------|
| Average ramp-up rate ( $T_L$ to $T_P$ )              | 3°C/second max.  |
| Preheat                                              |                  |
| -Temperature Min ( $T_{S\ min}$ )                    | 150°C            |
| -Temperature Max ( $T_{S\ max}$ )                    | 200°C            |
| -Time (min to max) ( $t_s$ )                         | 60-180 seconds   |
| $T_{S\ max}$ to $T_L$                                |                  |
| -Ramp-up Rate                                        | 3°C/second max.  |
| Time maintained above:                               |                  |
| -Temperature ( $T_L$ )                               | 217°C            |
| -Time ( $t_L$ )                                      | 60-150 seconds   |
| Peak Temperature ( $T_P$ )                           | 260°C            |
| Time within 5°C of actual Peak Temperature ( $t_P$ ) | 20-40 seconds    |
| Ramp-down Rate                                       | 6°C/second max.  |
| Time 25°C to Peak Temperature                        | 8 minutes max.   |

Packaging

|      |                                                                                     |                   |                |           |
|------|-------------------------------------------------------------------------------------|-------------------|----------------|-----------|
| Tape |     | Items             | Dimension (mm) |           |
|      |                                                                                     |                   | Spec.          | Tolerance |
|      |                                                                                     | W                 | 8.00           | ±0.20     |
|      |                                                                                     | P0                | 4.00           | ±0.10     |
|      |                                                                                     | P1                | 4.00           | ±0.10     |
|      |                                                                                     | P2                | 2.00           | ±0.10     |
|      |                                                                                     | D0                | 1.55           | ±0.05     |
|      |                                                                                     | D1                | 1.00           | ±0.05     |
|      |                                                                                     | E                 | 1.75           | ±0.10     |
|      |                                                                                     | F                 | 3.50           | ±0.10     |
|      |                                                                                     | A0                | 2.00           | ±0.10     |
|      |                                                                                     | K0                | 2.00           | ±0.10     |
|      |                                                                                     | B0                | 3.80           | ±0.10     |
|      |                                                                                     | t0                | 0.30           | ±0.10     |
| Reel |  | D                 | 170.00         | ±2.00     |
|      |                                                                                     | d                 | 13.00          | ±0.50     |
|      |                                                                                     | L                 | 12.00          | ±2.00     |
|      |                                                                                     | t                 | 1.20           | ±0.20     |
|      |                                                                                     | Quantity: 2500pcs |                |           |
|      |                                                                                     |                   |                |           |

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