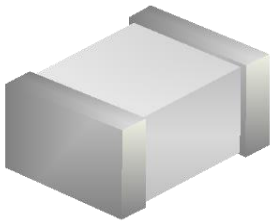
# GDTN2RS3B-470

**Gas Discharge Tube**

## Features

- Excellent SMD handling
- Extremely small size
- Very fast response time
- Stable performance over life
- Extremely low capacitance
- High insulation resistance
- Moisture sensitivity level: Level 1



## Application

- Modem
- Splitter
- Application with limited space
- Line cards
- PCI cards

## Electrical specifications

| Part number | DC Spark-over Voltage 1) 2) | Maximum Impulse Spark-over Voltage | Service Life | Insulation resistance | Capacitance | Marking Code |
|---|---|---|---|---|---|---|
| | | 1kv/μs | 8/20μs 10times | @ 100$V_{DC}$ | @ 1 MHz | |
| | (V) | (V) | (KA) | (GΩ） | （pF) | |
| GDTN2RS3B-470 | 470±30% | 1500 | 0.5 | > 1 | < 0.6 | None |

1) At delivery AQL 0.65 level II, DIN ISO 2859.

2) In ionized mode.

Terms and current waveforms in accordance with: ITU-T Rec. K.12; IEC 61643-21 and DIN 57845/VDE0845.

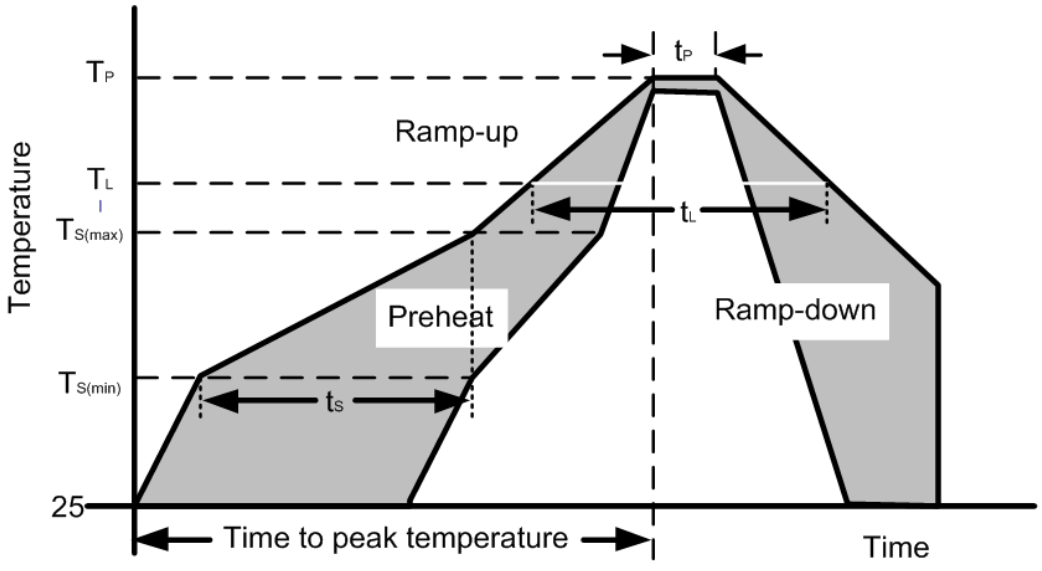
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## Thermal Resistances

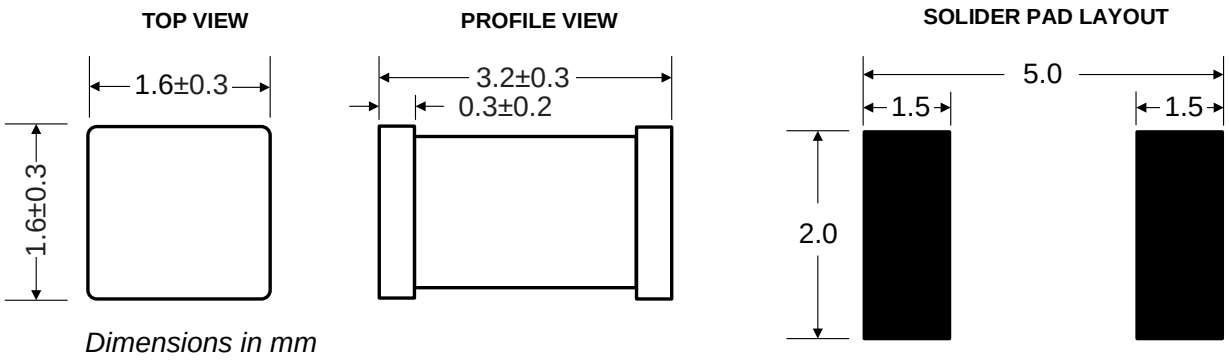
| Parameter | Value | Unit |
|---|---|---|
| Storage & Operating temperature range | -40 to +85 | °C |

## Soldering Parameters

| Reflow Condition | | Pb – Free assembly |
|---|---|---|
| Pre Heat | Temperature Min ($T_{s(min)}$) | 150°C |
| | Temperature Max ($T_{s(max)}$) | 200°C |
| | Time (min to max) (ts ) | 60 – 180 secs |
| $T_{S(max)}$ to $T_L$——Ramp-up Rate | | 3°C/second max |
| Reflow | Temperature ($T_L$) (Liquidus) | 217°C |
| | Temperature ($t_L$) | 60 – 150 seconds |
| Peak Temperature ($T_P$) | | $260^{+0/-5}$ °C |
| Time within actual peak Temperature ($t_p$ ) | | 20 – 40 seconds |
| Ramp-down Rate | | 6°C/second max |
| Time 25°C to peak Temperature ($T_P$) | | 8 minutes Max. |
| Do not exceed | | 260°C |



## Dimensional drawing

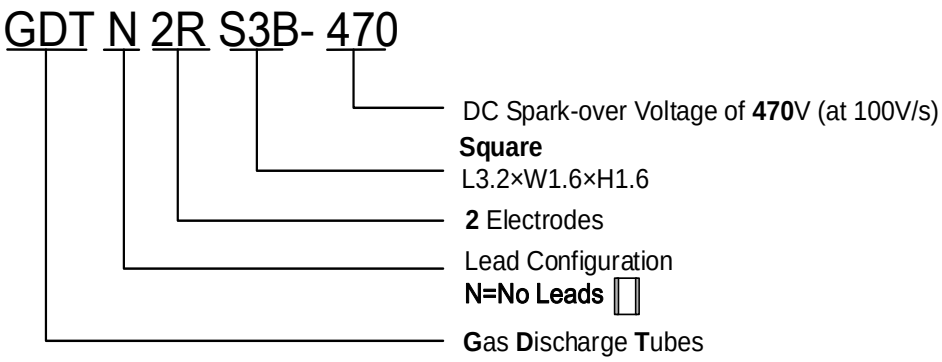



*Dimensions in mm*

## Cautions and warnings

- Surge arresters must not be operated directly in power supply networks.
- Surge arresters may become hot in case of longer periods of current stress (danger of burning).
- Surge arresters may be used only within their specified values. In case of overload, the headcontacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.

## Part Numbering System



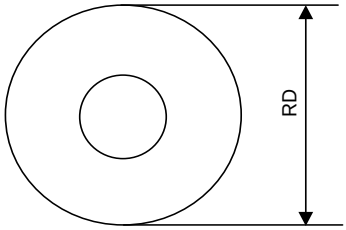

## Package Information

**Tape and Reel**: 3000pcs per reel.

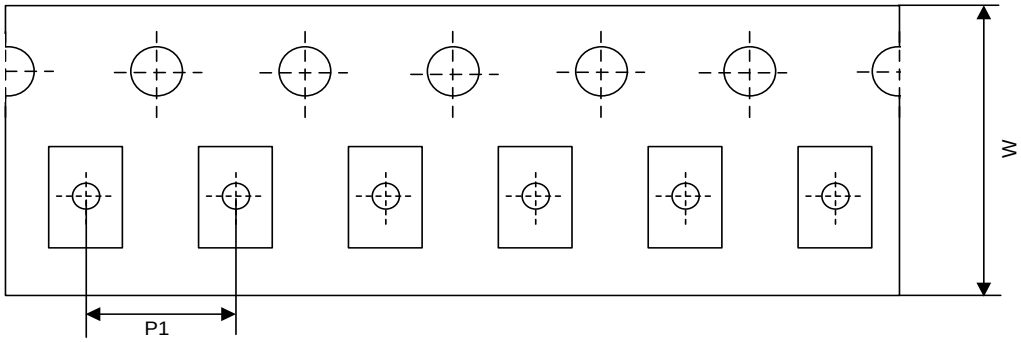
# Tape and Reel Information

| | | |
|---|---|---|
| RD | Reel Dimensions | 13 inch |
| W | Overall width of the carrier tape | 12 mm |
| P1 | Pitch between successive cavity centers | 8mm |

Reel Dimensions Schematic diagram




Tape Dimensions Schematic diagram




Quadrant Assignments for PIN1 Orientation in tape

## Contact Information

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WAYON website: **http://www.way-on.com**
For additional information, please contact your local Sales Representative.

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# Product Specification Statement

The product specification aims to provide users with a reference regarding various product parameters, performance, and usage. It presents certain aspects of the product's performance in graphical form and is intended solely for users to select product and make product comparisons, enabling users to better understand and evaluate the characteristics and advantages of the product. It does not constitute any commitment, warranty, or guarantee.

The product parameters described in the product specification are numerical values, characteristics, and functions obtained through actual testing or theoretical calculations of the product in an independent or ideal state. Due to the complexity of product applications and variations in test conditions and equipment, there may be slight fluctuations in parameter test values. WAYON shall not guarantee that the actual performance of the product when installed in the customer's system or equipment will be entirely consistent with the product specification, especially concerning dynamic parameters. It is recommended that users consult with professionals for product selection and system design. Users should also thoroughly validate and assess whether the actual parameters and performance when installed in their respective systems or equipment meet their requirements or expectations. Additionally, users should exercise caution in verifying product compatibility issues, and WAYON assumes no responsibility for the application of the product.

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Users are advised to pay attention to the parameter limit values specified in the product specification and maintain a certain margin in design or application to ensure that the product does not exceed the parameter limit values defined in the product specification. This precaution should be taken to avoid exceeding one or more of the limit values, which may result in permanent irreversible damage to the product, ultimately affecting the quality and reliability of the system or equipment.

The design of the product is intended to meet civilian needs and is not guaranteed for use in harsh environments or precision equipment. It is not recommended for use in systems or equipment such as medical devices, aircraft, nuclear power, and similar systems, where failures in these systems or equipment could reasonably be expected to result in personal injury. WAYON shall assume no responsibility for any consequences resulting from such usage.

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