# CMS3025V271P501-B

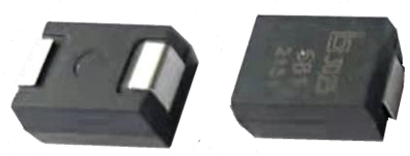
## Descriptions 产品描述

The CMS3025V271P501-B Series are manufactured with encapsulated cylindrical varistor elements as small SMD packages. The products are designed to suppress a variety of transient events, including those specified in IEC61000-4-2, IEC61000-4-5 and other standards used for Electromagnetic Compliance (EMC).

These devices feature high energy absorption capabilities (3025 equaled to 7D MOV), high working temperature (125°C) and also fast response thus low clamping voltages. These characteristics make the devices the best replacement of DIP-MOV in many applications, especially with space limits and SMT installation requirements.

## Features 产品特征

- Cylindrical varistor elements, encapsulated
- High energy absorption capability
- UL94V-0 flammability rating
- Low leakage current <20µA
- Application in surge protection of AC supply systems
- SMD type Body size 3025
- Suitable for lead-free soldering
- RoHS compliant
- TUV: B180102653001
- CQC: CQC21001318502



**Apperance**

## Order Information 包装信息

| Device Size | Quantity | Reel Size |
|---|---|---|
| 3025 | 1500 pcs | 15 Inch<br>(380x16.4mm) |

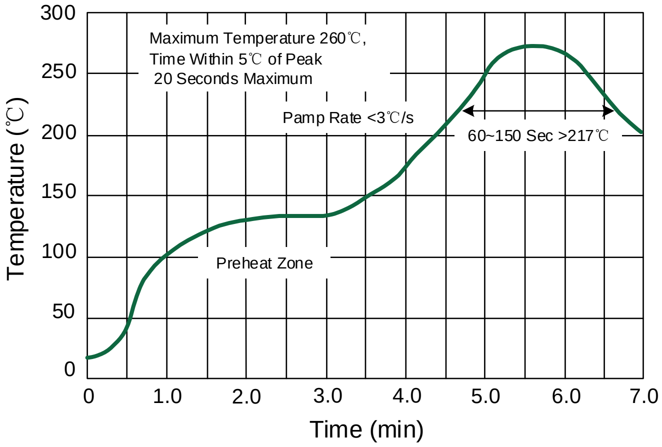
## General Technical Data 技术参数

| Parameter | Value |
|---|---|
| Maximum RMS operating voltage | 175V |
| Maximum DC operating voltage | 225 V |
| Maximum surge current (8/20µs) | 1200A |
| Maximum leakage current at $V_{DC}$ | 20 µA |
| Operating temperature range | -40°C to +125 °C |
| Storage temperature | -40°C to +125 °C |

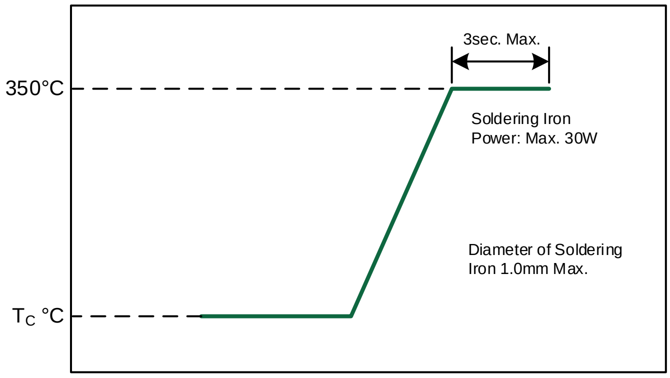
## Device Ratings and Specifications 额定值和规格

| 型号<br>Part Number | 最大持续电压 Maximum Continuous Voltage (V) | | 压敏电压 Nominal Varistor Voltage @1mA (V) | 最大钳位电压 Clamping Voltage (Max. V) | 最大钳位电流 Class Current (Max. A) | 最大峰值电流 Maximum Peak Current 8/20μs (A) | | 能量 Energy (J) (2ms) | 额定功率 Rated Power (mW) | TUV | CQC |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AC | DC | $V_N$ | $V_C$ | 8/20μs<br>$I_C$ | 1 Time | 2 Times | 1 Time | | | |
| CMS3025V271P501-B | 175 | 225 | 270[243-297] | 455 | 10 | 1200 | 1000 | 8.0 | 200 | ● | ● |

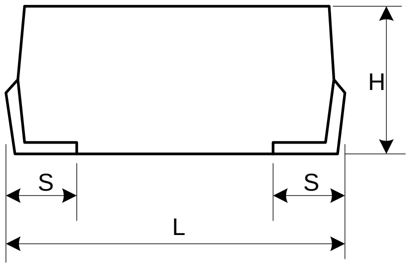
## Lead–free Re-flow Solder Profile

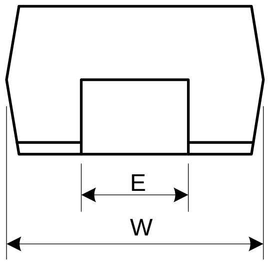


## Iron Soldering Profile



## Product Dimensions 产品尺寸





| Dimensions | 3025 | |
|---|---|---|
| | Inch | Millimeter |
| **L** | 0.307~0.339 | 7.80~8.60 |
| **W** | 0.236~0.260 | 6.00~6.60 |
| **H** | 0.149~0.181 | 3.80~4.60 |
| **S** | 0.047~0.071 | 1.20~1.80 |
| **E** | 0.106~0.130 | 2.70~3.30 |

## Storage 存储条件

- Storage temperature range (packaging conditions): -10℃~+40℃ RH 70% (Max.).
  存储温度范围（包装情况下）-10℃~+40℃ RH 70% (最高.)。
- The solderability of the external electrode may be deteriorated if packages are stored where they are exposed to high humidity. Package must be stored at 40℃ or less and 70% RH or less.
  如果将包装存放在暴露的高湿度地方，则外部电极的可焊性可能会变差。包装必须储存在40°C或更低，RH为70%或更低。
- The solderability of the external electrode may be deteriorated if packages are stored where they are exposed to dust of harmful gas (e.g. HCl, sulfurous gas of $H_2S$).
  如果将包装存放在暴露的有害气体（例如HCl，H2S的含硫气体）以及粉尘地方，则外部电极的可焊性可能会变差。
- Packaging material may be deformed if package are stored where they are exposed to heat of direct sunlight.
  如果包装材料存放在暴露的阳光直射高温下，包装材料可能会变形。
- Solderability shall be guaranteed for 12 months from the date of delivery on condition that they are stored at the environment specified in Clause 2. For those parts, which passed more than 12 months shall be checked solder-ability before use.
  自交货之日起，可焊性应保证12个月，前提是储存在第2条规定的环境中。对于超过12个月的产品，应在使用前检查可焊性。

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