

BT131-800D 1A TRIAC

Rev.A.1.0

## DESCRIPTION:

The BT131-800D triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. Package SOT-223 is RoHS compliant.

## MAIN FEATURES

## ABSOLUTE MAXIMUM RATINGS

| Parameter                                               | Symbol           | Value   | Unit |
|---------------------------------------------------------|------------------|---------|------|
| Storage junction temperature range                      | T <sub>stg</sub> | -40-150 |      |
| Operating junction temperature range                    |                  |         |      |
|                                                         |                  |         |      |
| Repetitive peak reverse voltage (T <sub>j</sub> =25 °C) | V <sub>RRM</sub> | 800     | V -  |

ELECTRICAL CHARACTERISTICS (unless otherwise specified)

| Symbol          | Test Condition                                                               | Quadrant | Value |     | Unit |
|-----------------|------------------------------------------------------------------------------|----------|-------|-----|------|
| I <sub>GT</sub> | V <sub>D</sub> =12V R <sub>L</sub> =33                                       | - -      | MAX.  | 5   | mA   |
|                 |                                                                              |          |       | 10  |      |
| V <sub>GT</sub> |                                                                              | ALL      | MAX.  | 1.3 | V    |
| V <sub>GD</sub> | V <sub>D</sub> =V <sub>DRM</sub> T <sub>J</sub> =125<br>R <sub>L</sub> =3.3k | ALL      | MIN.  | 0.2 | V    |

MARKING

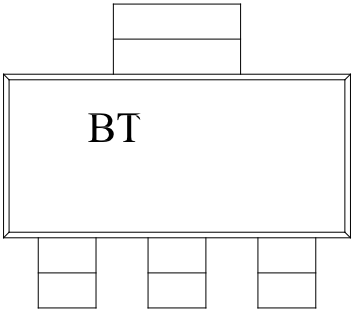


FIG.3: RMS on-state current versus ambient temperature (printed circuit board FR4, copper thickness: P (full cycle)

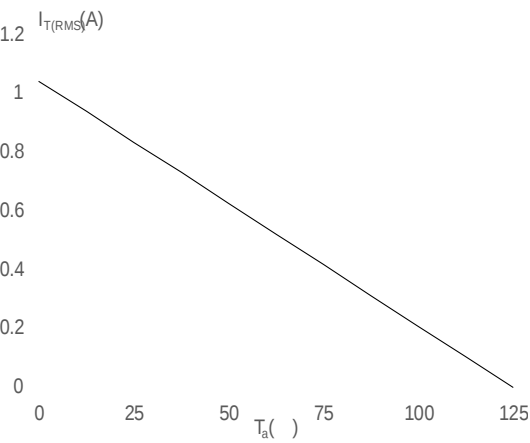


FIG.4: Surge peak on-state current versus number of cycles



## ORDERING INFORMATION

| Order code | Voltage<br>$V_{\text{DRM}}/V_{\text{RRM}}$ (V) | IGT(mA) |    | Package | Base qty.<br>(pcs) | Delivery<br>mode |
|------------|------------------------------------------------|---------|----|---------|--------------------|------------------|
|            |                                                | - -     |    |         |                    |                  |
| BT131-800D | 800                                            | 5       | 10 | SOT-223 | 4,000              | Tape & Reel      |

## Document Revision History

| Date         | Revision | Changes                        |
|--------------|----------|--------------------------------|
| Apr.17, 2023 | A.1.0    | Last updated                   |
| Oct.24, 2025 | A.1.1    | Revise PACKAGE MECHANICAL DATA |





