# BRESD24V0M2B3MAQ

Rev.B Apr.-2024

**DATA SHEET**

SOT-23 TVS

TVS Array in a SOT23 Plastic Package.

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## / Absolute Maximum Ratings(Ta=25 )

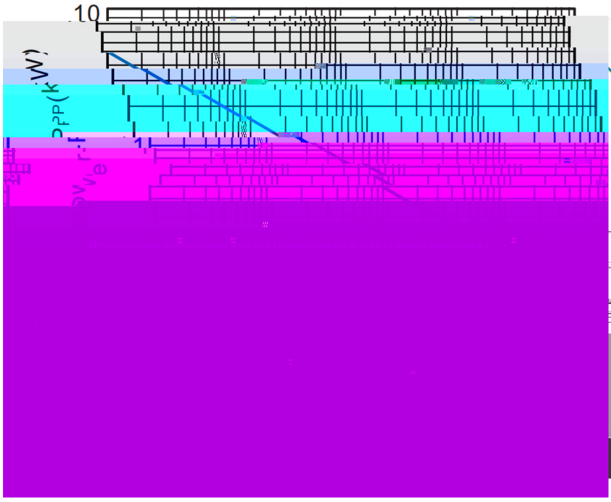
| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Peak Pulse Power (tp = 8/20  s) | $P_{PP}$ | 350 | W |
| Peak Pulse Current (tp = 8/20  s) | $I_{PP}$ | 8.0 | A |
| ESD per IEC 61000-4-2 (Air) | $V_{ESD1}$ | ±30 | kV |
| ESD per IEC 61000-4-2 (Contact) | $V_{ESD2}$ | ±30 | kV |
| Operating Temperature | $T_{OPR}$ | -55 to +150 | |
| Storage Temperature | $T_{STG}$ | -55 to +150 | |

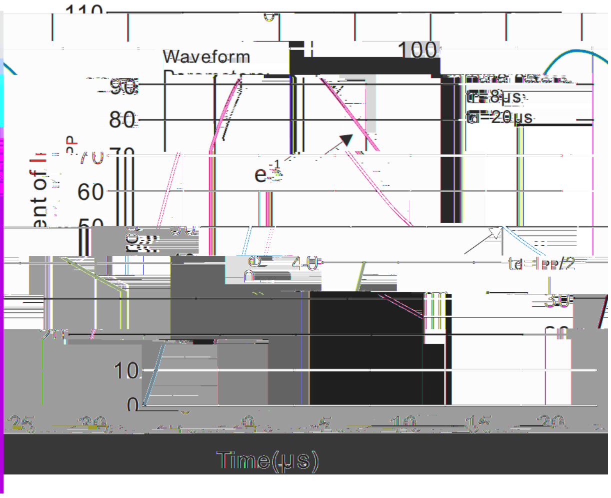
## / Electrical Characteristics(Ta=25 )

| Parameter | Symbol | Test Conditions | | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|---|
| Reverse Stand-Off Voltage | $V_{RWM}$ | | | | | 24 | V |
| Reverse Breakdown Voltage | $V_{BR}$ | It=1mA | | 26.7 | | | V |
| Reverse Leakage Current | $I_R$ | $V_{RWM}$=24V | T=25 | | | 1 | A |
| Clamping Voltage | $V_C$ | $I_{PP}$ =1.0A | $t_p$=8/20 S | | | 33 | V |
| | $V_C$ | $I_{PP}$ =8.0A | $t_p$=8/20 S | | | 44 | V |
| Capacitance. Any I/O pin to GND | $C_J$ | $V_R$=0V | f=1MHz | | 25 | 30 | pF |

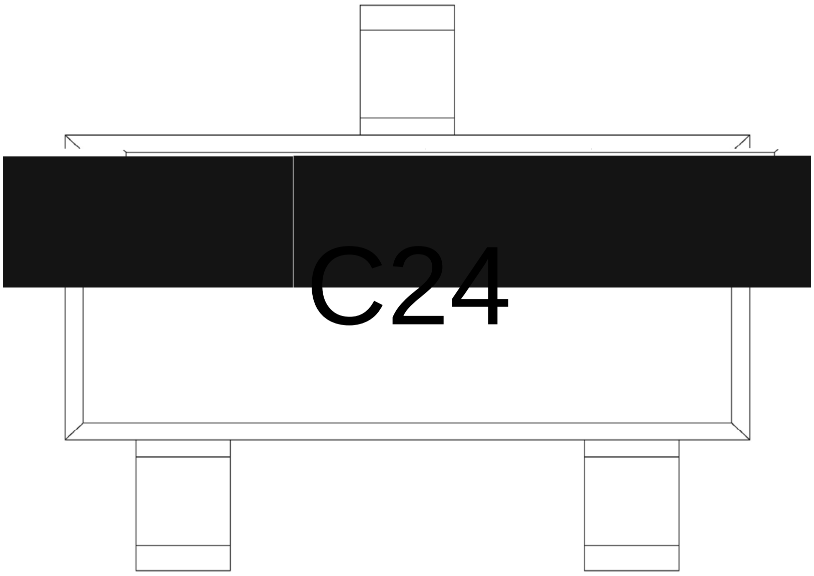
## / Electrical Characteristic Curve

### Fig.1 Non-Repetitive Pulse Po2.H03(e7.2r ve7.2s)-1.(. PulseT)18.(i)32.2me





## / Marking Instructions



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C24

Note:

C24: Product Type Code

## ( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)

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| | Note: |
|---|---|
| 1 150 200 60 120sec; | 1.Preheating:150~200 , Time:60~120sec. |
| 2 255±5 5±0.5sec; | 2.Peak Temp.:255±5 , Duration:5±0.5sec. |
| 3 2 10 /sec. | 3.Cooling Speed: 2~10 /sec. |

## / Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec