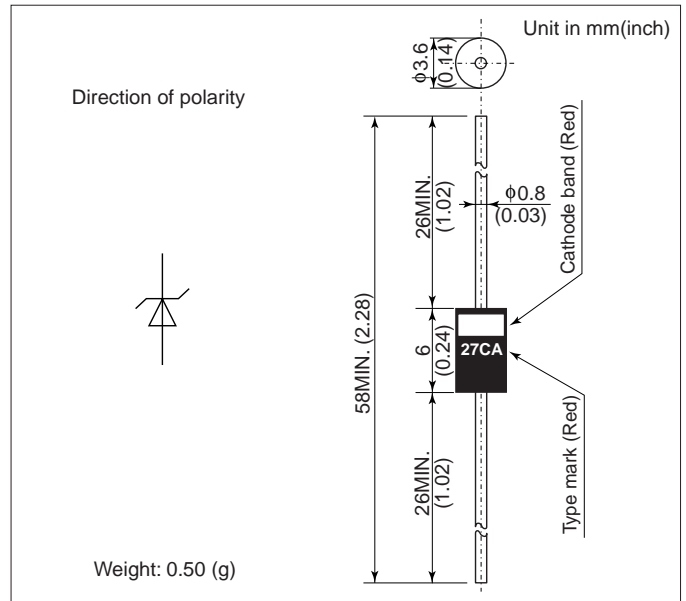


# DAM3B

## FEATURES

- High transient reverse power capability suitable for protecting automobile electronic components etc.
- Diffused-junction. Resin encapsulated.

## OUTLINE DRAWING



## ABSOLUTE MAXIMUM RATINGS

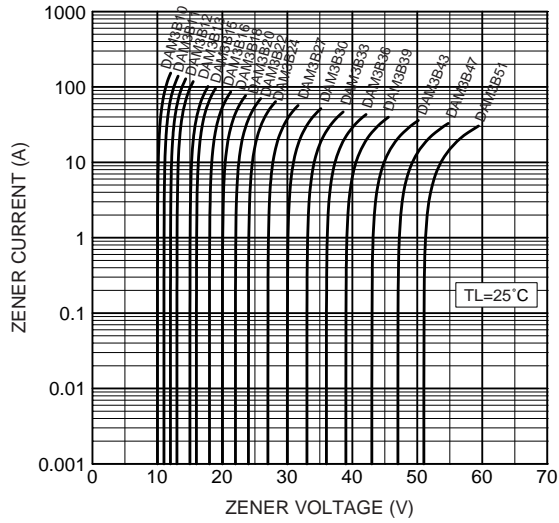
Items	Symbols	Units	Ratings
Non-Repetitive Peak Reverse One-Cycle Dissipation	$P_{RSM}$	W	1800(Rectangular pulse $t=0.1\text{ms}$ $T_i=25^\circ\text{C}$ start)
Operating Junction Temperature	$T_j$	$^\circ\text{C}$	-40 ~ +150
Storage Temperature	$T_{stg}$	$^\circ\text{C}$	-40 ~ +150
DC Reverse Voltage	$V_{DC}$	V	Refer to characteristics column

## CHARACTERISTICS( $T_L=25^\circ\text{C}$ )

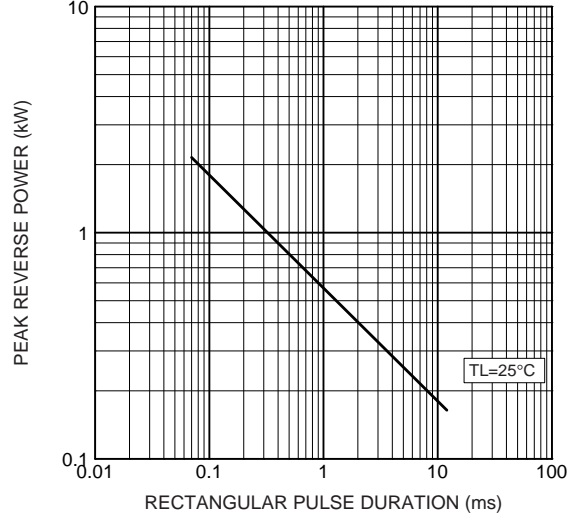
Type	DC Reverse Voltage $V_{DC}$ (V)	Characteristics				Maximum Reverse Current	
		Zener Voltage $V_z$ (V)		Maximum Dynamic Impedance $Z_z$ (ohm)	Test Current $I_z$ (mA)	$I_{RRM}$ ( $\mu\text{A}$ )	$V_R$ (V)
		Minimum	Maximum				
DAM3B10	7	9.4	10.6	15	75	50	7
DAM3B11	8	10.4	11.6	15	75	50	8
DAM3B12	9	11.4	12.7	15	75	50	9
DAM3B13	10	12.4	14.1	15	75	50	10
DAM3B15	11	13.5	15.6	15	75	50	11
DAM3B16	12	15.3	17.1	15	75	50	12
DAM3B18	13	16.8	19.1	15	45	50	13
DAM3B20	14	18.8	21.2	15	45	50	14
DAM3B22	16	20.8	23.3	15	45	50	16
DAM3B24	18	22.7	25.6	15	30	50	18
DAM3B27	20	25.1	28.9	15	30	50	20
DAM3B30	22	28.0	32.0	15	30	50	22
DAM3B33	24	31.0	35.0	15	30	50	24
DAM3B36	26	33.4	38.6	15	30	50	26
DAM3B39	28	36.1	41.9	15	30	50	28
DAM3B43	31	39.8	46.2	30	20	50	31
DAM3B47	34	43.3	50.7	30	20	50	34
DAM3B51	37	46.9	55.1	30	20	50	37

# DAM3B

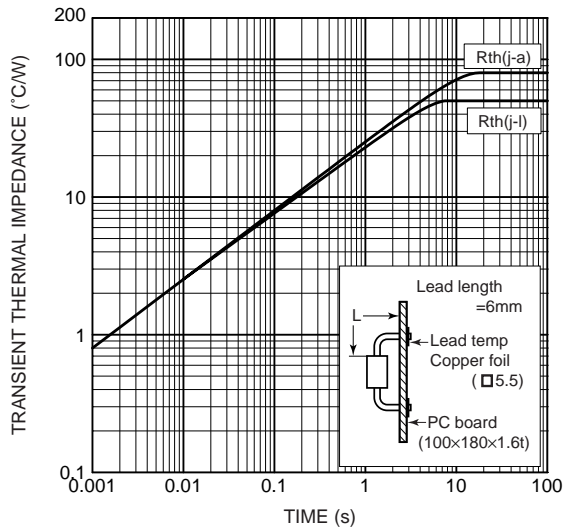
Typical zener characteristics



Typical reverse power characteristic (Rectangular pulse non-repetitive)



Transient thermal impedance



# HITACHI POWER SEMICONDUCTORS

## Notices

1. The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact Hitachi sales department for the latest version of this data sheets.
2. Please be sure to read "Precautions for Safe Use and Notices" in the individual brochure before use.
3. In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, life-support-related medical equipment, fuel control equipment and various kinds of safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement. Or consult Hitachi's sales department staff.
4. In no event shall Hitachi be liable for any damages that may result from an accident or any other cause during operation of the user's units according to this data sheets. Hitachi assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in this data sheets.
5. In no event shall Hitachi be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
6. No license is granted by this data sheets under any patents or other rights of any third party or Hitachi, Ltd.
7. This data sheets may not be reproduced or duplicated, in any form, in whole or in part , without the expressed written permission of Hitachi, Ltd.
8. The products (technologies) described in this data sheets are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety not are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations.

- For inquiries relating to the products, please contact nearest overseas representatives which is located "Inquiry" portion on the top page of a home page.

Hitachi power semiconductor home page address <http://www.hitachi.co.jp/products/power/pse/>

**HITACHI**