

## 4SODJ36A Transient Voltage Suppressor

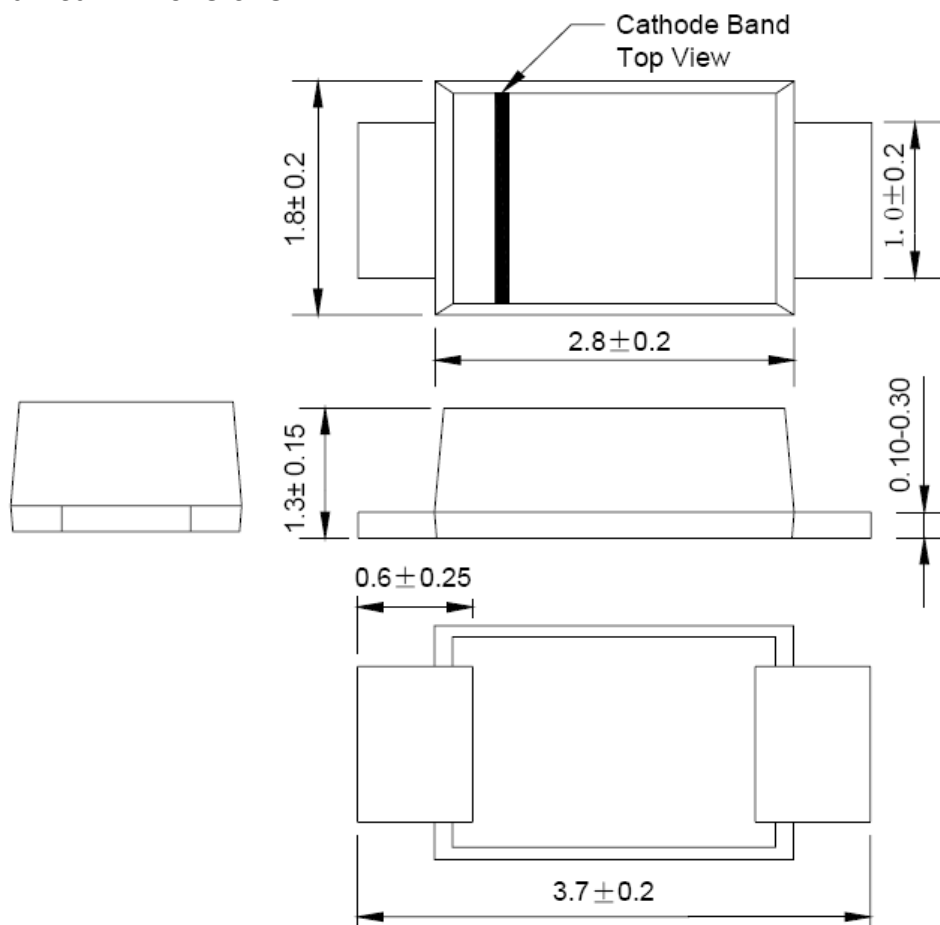
### Applications

- Power supply protection
- Automotive application
- Industrial application
- Power management

### Features

- Rated peak pulse power:  $P_{PPM} = 400\text{ W}$
- Small plastic package suitable for surface-mounted design
- Reverse standoff voltage range:  $V_{RWM} = 36\text{ V}$
- Reverse current:  $I_{RM} = 0.001\text{ mA}$
- AEC-Q101 qualified
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

### Mechanical Dimensions In mm



**SOD-123FL**



---

### Marking Diagram:

---



AU = Device Code

**Cautions:** Molding resin  
Epoxy resin UL: 94V-0

---

### Ordering Information

---

Device	Package	Shipping
4SODJ36A	SOD-123FL (Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

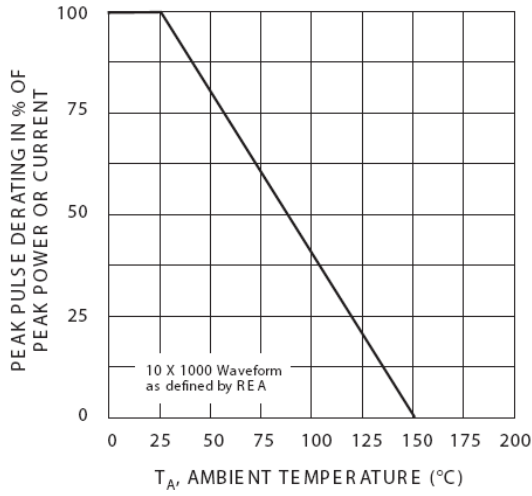


**Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$  unless otherwise specified**

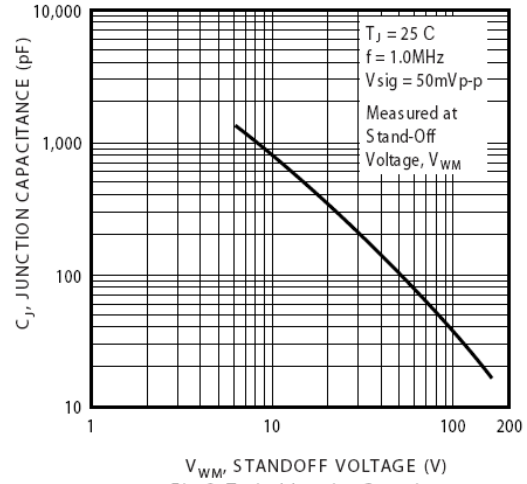
Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation at $T_A=25^\circ\text{C}$ by 10x1000 $\mu\text{s}$ Waveform	$P_{PPM}$	400	W
Peak Forward Surge Current, 8.3ms Single Half Sine Wave	$I_{FSM}$	50	A
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to 150	$^\circ\text{C}$

**Electrical Characteristics @ $T_A=25^\circ\text{C}$  unless otherwise specified**

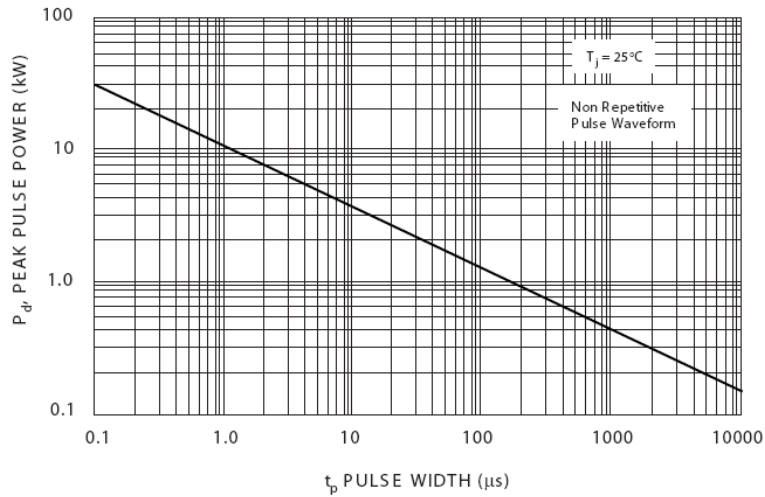
Part Number (Uni)	Device Code	Reverse Stand-off Voltage ( $V_R$ ) (V)	Breakdown Voltage @ $I_T$ ( $V_{BR}$ ) (Volts)		Test Current ( $I_T$ ) (mA)	Max Clamping Voltage @ IPP ( $V_C$ ) (V)	Peak Pulse Current ( $I_{pp}$ ) (A)	Reverse leakage @ $V_R$ ( $I_R$ ) ( $\mu\text{A}$ )
			MIN	MAX				
4SODJ36A	AU	36.0	40.00	44.20	1	58.1	6.9	0.1



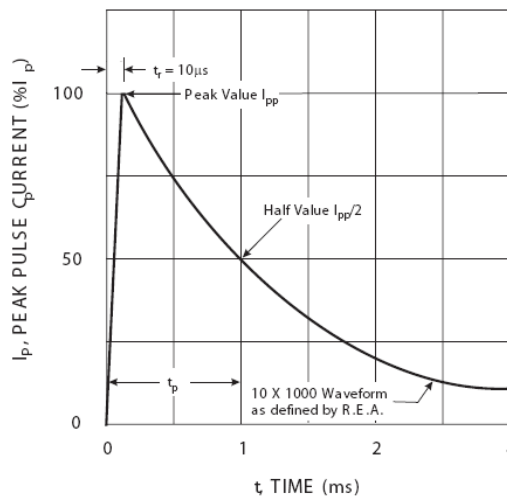
$T_A$ , AMBIENT TEMPERATURE ( $^{\circ}C$ )  
Fig. 1 Pulse Derating Curve



$V_{WM}$ , STANDOFF VOLTAGE (V)  
Fig. 2 Typical Junction Capacitance



$t_p$  PULSE WIDTH ( $\mu s$ )  
Fig. 3 Pulse Rating Curve



$t$ , TIME (ms)  
Fig. 4 Pulse Waveform

**DISCLAIMER:**

- 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 the SMC - Sangdest Microelectronics (Nanjing) Co., Ltd sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and 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.
- 3- In no event shall SMC - Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). SMC - Sangdest Microelectronics (Nanjing) Co., Ltd assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall SMC - Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or SMC - Sangdest Microelectronics (Nanjing) Co., Ltd.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of SMC - Sangdest Microelectronics (Nanjing) Co., Ltd.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor 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..