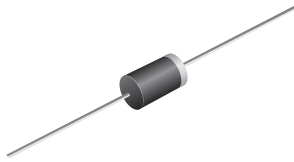


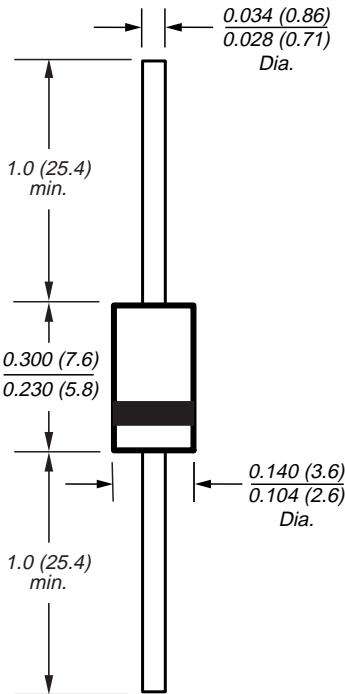


Low Capacitance TRANSZORB® Transient Voltage Suppressors

Peak Pulse Power 500W
Stand-off Voltage 5.0 to 50V

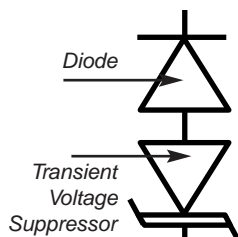


DO-204AC (DO-15)



Dimensions in inches and (millimeters)

Schematic



Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated junction
- 500W peak pulse power capability with a 10/1000µs waveform, repetition rate (duty cycle): 0.01%
- Excellent clamping capability
- Low incremental surge resistance
- Very fast response time
- Ideal for data line applications
- High temperature soldering guaranteed: 265°C/10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3 kg) tension

Mechanical Data

Case: JEDEC DO-204AC molded plastic body over passivated junction

Terminals: Solder plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes TVS cathode

Mounting Position: Any

Weight: 0.015 oz., 0.4 g

Packaging Codes – Options (Antistatic):

51 – 1K per Bulk box, 10K/carton

54 – 4K per 13" paper Reel
(52mm horiz. tape), 12K/carton

73 – 2K per horiz. tape & Ammo box, 20K/carton

Maximum Ratings and Thermal Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Limit	Unit
Peak pulse power dissipation with a 10/1000µs waveform	PPPM	Minimum 500 ⁽¹⁾	W
Steady state power dissipation at T _L = 75°C with lead lengths or 0.375" (9.5mm)	P _{M(AV)}	3.0	W
Peak pulse power surge current with a 10/1000µs waveform (Fig. 3)	I _{PPM}	See Next Table ⁽¹⁾	A
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +175	°C

Note: (1) Non-repetitive current pulse, per Fig.3 and derated above T_A = 25°C per Fig. 2

SAC5.0 thru SAC50 Series



Vishay Semiconductors
formerly General Semiconductor

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Part Number	Stand-off Voltage ⁽¹⁾ V _{WM} (V)	Minimum Breakdown Voltage at I _T = 1.0mA V _(BR) (V)	Maximum Reverse Leakage at V _{WM} I _D (μA)	Maximum Clamping Voltage at I _{PP} = 5.0A V _C (V)	Maximum Peak Pulse Current per Fig. 3 I _{PP} (A)	Maximum Junction Capacitance at 0 Volts (pF)	Working Inverse Blocking Voltage V _{WIB} (V)	Inverse Blocking Leakage Current V _{WIB} I _{IB} (mA)	Peak Inverse Blocking Voltage V _{PIB} (V)
SAC5.0	5.0	7.60	300	10.0	44	50	75	1.0	100
SAC6.0	6.0	7.90	300	11.2	41	50	75	1.0	100
SAC7.0	7.0	8.33	300	12.6	38	50	75	1.0	100
SAC8.0	8.0	8.89	100	13.4	36	50	75	1.0	100
SAC8.5	8.5	9.44	50	14.0	34	50	75	1.0	100
SAC10	10	11.10	5.0	16.3	29	50	75	1.0	100
SAC12	12	13.30	5.0	19.0	25	50	75	1.0	100
SAC15	15	16.70	5.0	23.6	20	50	75	1.0	100
SAC18	18	20.00	5.0	28.8	15	50	75	1.0	100
SAC22	22	24.40	5.0	35.4	14	50	75	1.0	100
SAC26	26	28.90	5.0	42.3	11.1	50	75	1.0	100
SAC30	30	33.30	5.0	48.6	10.0	50	75	1.0	100
SAC36	36	40.00	5.0	60.0	8.6	50	75	1.0	100
SAC45	45	50.00	5.0	77.0	6.8	50	150	1.0	200
SAC50	50	55.50	5.0	88.0	5.8	50	150	1.0	200

Notes: (1) Non-repetitive current pulse, per Fig.3 and derated above T_A = 25°C per Fig. 2

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig. 1 – Peak Pulse Power Rating Curve

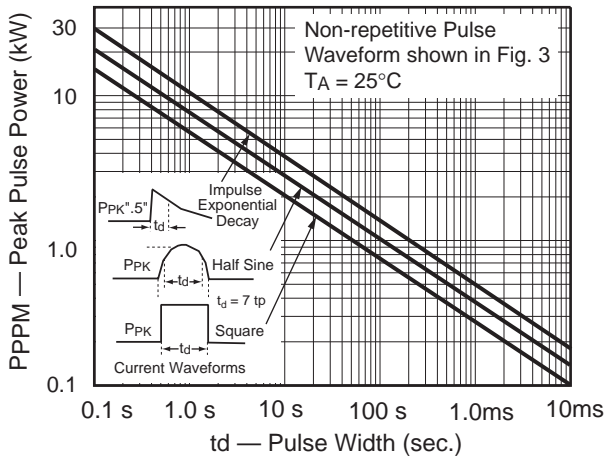


Fig. 2 - Power Derating Curve

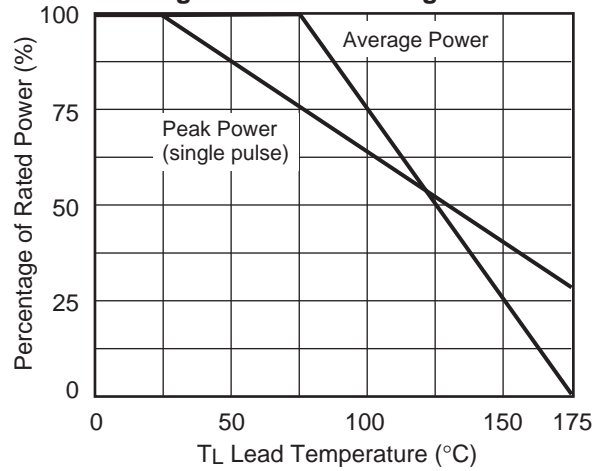


Fig. 3 – Pulse Waveform

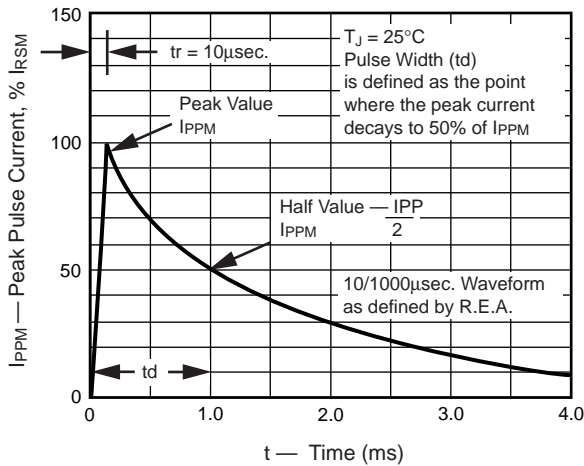
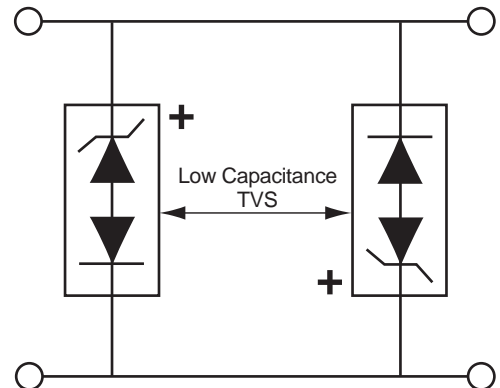


Fig. 4 - AC Line Protection Application



Application Note: Device must be used with two units in parallel, opposite in polarity as shown in circuit for AC signal line protection.



Notice

Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc., or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [ESD Suppressors / TVS Diodes](#) category:

Click to view products by [Vishay](#) manufacturer:

Other Similar products are found below :

[60KS200C](#) [D12V0H1U2WS-7](#) [D18V0L1B2LP-7B](#) [82356050220](#) [D5V0M5U6V-7](#) [NTE4902](#) [P4KE27CA](#) [P6KE11CA](#) [P6KE39CA-TP](#)
[P6KE8.2A](#) [SA110CA](#) [SA60CA](#) [SA64CA](#) [SMBJ12CATR](#) [SMBJ8.0A](#) [SMLJ30CA-TP](#) [ESD101-B1-02ELS E6327](#) [ESD112-B1-02EL E6327](#)
[ESD119B1W01005E6327XTSA1](#) [ESD5V0L1B02VH6327XTSA1](#) [ESD7451N2T5G](#) [19180-510](#) [CPDT-5V0USP-HF](#) [3.0SMCJ33CA-F](#)
[3.0SMCJ36A-F](#) [HSPC16701B02TP](#) [D3V3Q1B2DLP3-7](#) [D55V0M1B2WS-7](#) [DESD5V0U1BL-7B](#) [DRTR5V0U4SL-7](#) [SCM1293A-04SO](#)
[ESD200-B1-CSP0201 E6327](#) [ESD203-B1-02EL E6327](#) [SM12-7](#) [SMF8.0A-TP](#) [SMLJ45CA-TP](#) [CEN955 W/DATA](#) [82350120560](#)
[82356240030](#) [VESD12A1A-HD1-GS08](#) [CPDUR5V0R-HF](#) [CPDUR24V-HF](#) [CPDQC5V0U-HF](#) [CPDQC5V0USP-HF](#) [CPDQC5V0-HF](#)
[D1213A-01LP4-7B](#) [D1213A-02WL-7](#) [ESDLIN1524BJ-HQ](#) [5KP100A](#) [5KP15A](#)