



TRANSZORB® TVS IN SMB (DO-214AA)

OFFER TIGHTER $\pm 3.5\%$ BREAKDOWN VOLTAGE TOLERANCE

IN A NUTSHELL

FEATURES

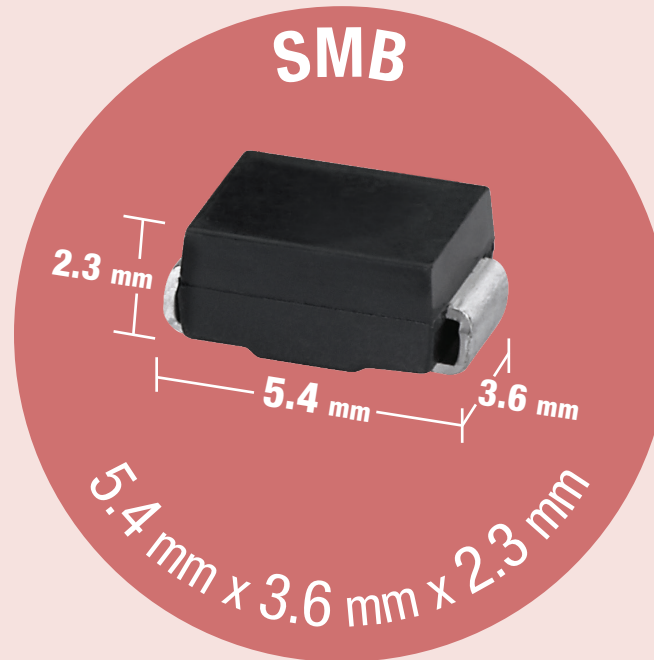
$\pm 3.5\%$ Tightened breakdown voltage
tolerance of $\pm 3.5\%$

High peak pulse surge currents
from **2.03 A to 65.9 A**

9.1 V to 301 V Excellent clamping capability
from **9.1 V to 301 V**

High surge capability to 600 W at 10/1000 μ s

Available with unidirectional or bidirectional polarity



ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Device Type	Breakdown Voltage V_{BR} at $I_T^{(1)}$ (V)		Test Current I_T (A)	Stand-Off Voltage V_{WM} (V)	Max Reverse Leakage at V_{WM} I_R (μ A) ⁽²⁾	Max Peak Pulse Surge Current I_{PPM} (A) ⁽³⁾	Max Clamping Voltage at I_{PPM} V_C (V)
	min	max					
SMBJ5.0D*	6.50	6.97	10	5.0	500	65.9	9.1
SMBJ6.0D*	6.77	7.27	10	6.0	500	58.9	10.2
SMBJ6.5D*	7.33	7.87	10	6.5	300	54.5	11.0
SMBJ7.0D*	7.90	8.48	10	7.0	150	50.8	11.8
SMBJ7.5D*	8.46	9.08	1.0	7.5	75	47.2	12.7
SMBJ8.0D*	9.03	9.69	1.0	8.0	35	44.8	13.4
SMBJ8.5D*	9.57	10.3	1.0	8.5	15	42.2	14.3
SMBJ9.0D*	10.2	10.9	1.0	9.0	5.0	39.7	15.1
SMBJ10D*	11.3	12.1	1.0	10	2.0	35.9	16.7
SMBJ11D*	12.4	13.3	1.0	11	2.0	33.5	17.9
SMBJ12D*	13.5	14.5	1.0	12	2.0	30.6	19.6
SMBJ13D*	14.6	15.7	1.0	13	0.5	28.3	21.2
SMBJ14D*	15.8	17.0	1.0	14	0.5	26.2	22.9
SMBJ15D*	17.0	18.2	1.0	15	0.5	25.0	24.0
SMBJ16D*	18.1	19.4	1.0	16	0.5	23.4	25.6
SMBJ17D*	19.2	20.6	1.0	17	0.5	22.1	27.2
SMBJ18D*	20.3	21.8	1.0	18	0.5	20.8	28.8
SMBJ20D*	22.5	24.2	1.0	20	0.5	18.8	32.0
SMBJ22D*	24.8	26.6	1.0	22	0.5	17.1	35.1
SMBJ24D*	27.1	29.1	1.0	24	0.5	15.6	38.4
SMBJ26D*	29.3	31.5	1.0	26	0.5	14.5	41.6
SMBJ28D*	31.6	33.9	1.0	28	0.5	13.4	44.7
SMBJ30D*	33.8	36.3	1.0	30	0.5	12.6	47.7
SMBJ33D*	37.3	40.0	1.0	33	0.5	11.5	52.5
SMBJ36D*	40.6	43.6	1.0	36	0.5	10.5	57.3
SMBJ40D*	45.1	48.4	1.0	40	0.5	9.43	63.6
SMBJ43D*	48.5	52.1	1.0	43	0.5	8.76	68.5
SMBJ45D*	50.8	54.5	1.0	45	0.5	8.40	71.6
SMBJ48D*	54.1	58.1	1.0	48	0.5	7.90	76.3
SMBJ51D*	57.6	61.8	1.0	51	0.5	7.40	81.2
SMBJ54D*	60.9	65.4	1.0	54	0.5	7.00	85.9
SMBJ58D*	65.4	70.2	1.0	58	0.5	6.50	92.3
SMBJ60D*	67.7	72.7	1.0	60	0.5	6.28	95.5
SMBJ64D*	72.2	77.5	1.0	64	0.5	5.88	102
SMBJ70D*	79.0	84.8	1.0	70	0.5	5.40	111
SMBJ75D*	84.6	90.8	1.0	75	0.5	5.06	119
SMBJ78D*	88.1	94.4	1.0	78	0.5	4.86	124
SMBJ85D*	95.7	103	1.0	85	0.5	4.46	135
SMBJ90D*	102	109	1.0	90	0.5	4.17	144
SMBJ100D*	113	121	1.0	100	0.5	3.77	159
SMBJ110D*	124	133	1.0	110	0.5	3.45	174
SMBJ120D*	135	145	1.0	120	0.5	3.15	190
SMBJ130D*	146	157	1.0	130	0.5	2.94	206
SMBJ150D*	170	182	1.0	150	0.5	2.53	239
SMBJ160D*	181	194	1.0	160	0.5	2.34	256
SMBJ170D*	192	206	1.0	170	0.5	2.23	270
SMBJ188D	212	228	1.0	188	0.5	2.03	301

APPLICATIONS



Designed to **protect** sensitive electronics against **voltage transients** induced by inductive load switching and lightning

General voltage surge protection in **consumer, computer, industrial, and telecommunications** equipment



TELECOM



CONSUMER



INDUSTRIAL

To view datasheet, click here

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Notes

* All terms and symbols are consistent with ANSI/IEE C62.35
(1) Pulse test: $t_r < 50$ ns
(2) For bi-directional types having V_{WM} of 12 V and less, the ID limit is doubled

(3) Surge current waveform per fig. 3 and derate per fig. 2
* Underwriters Laboratory Recognition for the classification of protectors (QV02) under the UL standard for safety 497B and file number E136766 for both uni-directional and bi-directional device

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