

semiconductors :: product :: **Transient Voltage Suppressor (TVS)**

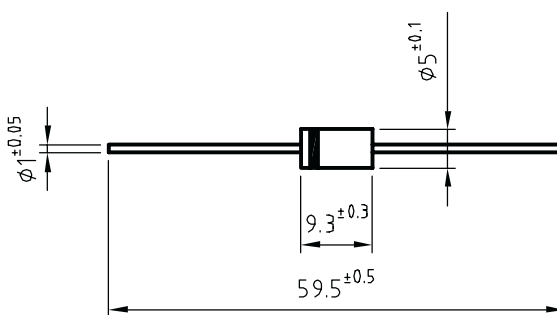

Product: Transient Voltage Suppressor (TVS)

These devices able to absorb high levels of energy in short time pulses without damage, having a very fast response time (<1ps) and an excellent clamping factor are specially suited for protection purposes in application of Automotive, Consumer and Computer sectors.

FAGOR ELECTRONICA offers unidirectional and bidirectional TVS products covering the range from 400W to 5000W, assembled in both leaded and SMD packages.

Product	Family	I _{pp} (A)	V _{CL} (V)	V _Z (V)	P _{pp} (W)	DIREC	OUTLINE
1.5KE39A-1N6285A	1.5KE-A	28	53.9	39	1500W	UNIDIREC.	DO201-AE

1500W Unidirectional and Bidirectional Transient Voltage Suppressor Diodes

<p>Dimensions in mm.</p> <p style="text-align: center;">DO201-AE (PLASTIC)</p>  <p>Mounting instructions</p> <ol style="list-style-type: none"> 1. Min. distance from body to soldering point, 4 mm. 2. Max. solder temperature, 350°C. 3. Max. soldering time, 3.5 sec. 4. Do not bend lead at a point closer than 3 mm. to the body. 	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> <p>Peak Pulse Power Rating At 1 ms. Exp. 1500 W</p> </td> <td style="width: 50%; border: none;"> <p>Reverse stand-off Voltage 5.5 ÷ 376 V</p> </td> </tr> </table> <div style="text-align: center; margin-top: 20px;">  </div> <ul style="list-style-type: none"> • Glass passivated junction • Low Capacitance AC signal protection • Response time typically < 1 ns. • Molded case • The plastic material carries U/L recognition 94 V-0 • Terminals: Axial leads 	<p>Peak Pulse Power Rating At 1 ms. Exp. 1500 W</p>	<p>Reverse stand-off Voltage 5.5 ÷ 376 V</p>
<p>Peak Pulse Power Rating At 1 ms. Exp. 1500 W</p>	<p>Reverse stand-off Voltage 5.5 ÷ 376 V</p>		

Maximum Ratings, according to IEC publication No. 134

P_{pp}	Peak pulse power with 10/1000 μ s exponential pulse	1500 W
I_{FSM}	Non repetitive surge peak forward current (t = 8.3 msec.) (Jedec Method) (Note 1)	200 A
T_j	Operating temperature range	- 65 to + 175 °C
T_{stg}	Storage temperature range	- 65 to + 175 °C
$P_{M(AV)}$	Steady state Power Dissipation (l = 10 mm)	5 W

Electrical Characteristics at Tamb = 25 °C

V_F	Max. forward voltage drop at $I_F = 100$ A (Note 1)	$V_{BR} < 220$ V	3.5 V
		$V_{BR} > 220$ V	5.0 V
R_{thj-l}	Max. thermal resistance (l = 10 mm.)		20 °C/W

Note 1: Valid only for Unidirectional.

1500W Unidirectional and Bidirectional Transient Voltage Suppressor Diodes

Type	Maximum Reverse Leakage Current		(1) Breakdown Voltage				I_R (mA)	Max. Clamping Voltage	
	I_{RM} (μ A)	at V_{RM} (V)	Min.	Nom	Max	V_{BR} (V) at		V_{CL} (V)	at I_{pp} max. 1ms. Expo. (A)
1N6267	1.5KE6V8	1000	5.50	6.12	6.8	7.48	10	10.8	139
1N6267A	1.5KE6V8A	1000	5.80	6.45	6.8	7.14	10	10.5	143
1N6268	1.5KE7V5	500	6.05	6.75	7.5	8.25	10	11.7	128
1N6268A	1.5KE7V5A	500	6.40	7.13	7.5	7.88	10	11.3	132
1N6269	1.5KE8V2	200	6.63	7.38	8.2	9.02	10	12.5	120
1N6269A	1.5KE8V2A	200	7.02	7.79	8.2	8.61	10	12.1	124
1N6270	1.5KE9V1	50	7.37	8.19	9.1	10.0	1	13.8	109
1N6270A	1.5KE9V1A	50	7.78	8.65	9.1	9.55	1	13.4	112
1N6271	1.5KE10	10	8.10	9.00	10	11.0	1	15.0	100
1N6271A	1.5KE10A	10	8.55	9.50	10	10.5	1	14.5	103
1N6272	1.5KE11	5	8.92	9.90	11	12.1	1	16.2	93
1N6272A	1.5KE11A	5	9.40	10.5	11	11.6	1	15.6	96
1N6273	1.5KE12	5	9.72	10.8	12	13.2	1	17.3	87
1N6273A	1.5KE12A	5	10.2	11.4	12	12.6	1	16.7	90
1N6274	1.5KE13	5	10.5	11.7	13	14.3	1	19.0	79
1N6274A	1.5KE13A	5	11.1	12.4	13	13.7	1	18.2	82
1N6275	1.5KE15	5	12.1	13.5	15	16.5	1	22.0	68
1N6275A	1.5KE15A	5	12.8	14.3	15	15.8	1	21.2	71
1N6276	1.5KE16	5	12.9	14.4	16	17.6	1	23.5	64
1N6276A	1.5KE16A	5	13.6	15.2	16	16.8	1	22.5	67
1N6277	1.5KE18	5	14.5	16.2	18	19.8	1	26.5	56.5
1N6277A	1.5KE18A	5	15.3	17.1	18	18.9	1	25.5	59.5
1N6278	1.5KE20	5	16.2	18.0	20	22.0	1	29.1	51.5
1N6278A	1.5KE20A	5	17.1	19.0	20	21.0	1	27.7	54
1N6279	1.5KE22	5	17.8	19.8	22	24.2	1	31.9	47
1N6279A	1.5KE22A	5	18.8	20.9	22	23.1	1	30.6	49
1N6280	1.5KE24	5	19.4	21.6	24	26.4	1	34.7	43
1N6280A	1.5KE24A	5	20.5	22.8	24	25.2	1	33.2	45
1N6281	1.5KE27	5	21.8	24.3	27	29.7	1	39.1	38.5
1N6281A	1.5KE27A	5	23.1	25.7	27	28.4	1	37.5	40
1N6282	1.5KE30	5	24.3	27.0	30	33.0	1	43.5	34.5
1N6282A	1.5KE30A	5	25.6	28.5	30	31.5	1	41.4	36
1N6283	1.5KE33	5	26.8	29.7	33	36.3	1	47.7	31.5
1N6283A	1.5KE33A	5	28.2	31.4	33	34.7	1	45.7	33
1N6284	1.5KE36	5	29.1	32.4	36	39.6	1	52.0	29
1N6284A	1.5KE36A	5	30.8	34.2	36	37.8	1	49.9	30
1N6285	1.5KE39	5	31.6	35.1	39	42.9	1	56.4	26.5
1N6285A	1.5KE39A	5	33.3	37.1	39	41.0	1	53.9	28
1N6286	1.5KE43	5	34.8	38.7	43	47.3	1	61.9	24
1N6286A	1.5KE43A	5	36.8	40.9	43	45.2	1	59.3	25.3
1N6287	1.5KE47	5	38.1	42.3	47	51.7	1	67.8	22.2
1N6287A	1.5KE47A	5	40.2	44.7	47	49.4	1	64.8	23.2
1N6288	1.5KE51	5	41.3	45.9	51	56.1	1	73.5	20.4
1N6288A	1.5KE51A	5	43.6	48.5	51	53.6	1	70.1	21.4

(1) Tested with pulses.
Pulse test: t_p - 50 ms; δ < 2%