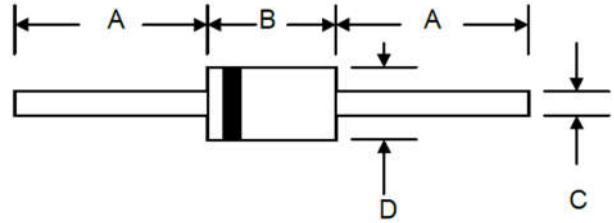


1500W TVS

FEATURES

- Voltage range 6.8V-400V
- 1500W peak pulse power dissipation
- Uni- and bidirectional versions available
- Fast response time



MECHANICAL DATA

- Case: DO-201AD(DO-27)
- Case material: Molded plastic. UL flammability
- Classification rating: 94V-0
- Weight: 1.2 grams (approximate)

DO-201AD(DO-27)		
Dim	Min	Max
A	25.4	—
B	8.50	9.50
C	0.96	1.06
D	5.0	5.60
All Dimensions in mm		

Marking:

- Unidirectional - type number and cathode band
- Bidirectional - type number only

MAXIMUM RATINGS AND CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit	
Peak power dissipation at $t_p=1.0\text{ms}$ (non-repetitive current pulse, derated above $T_A = 25^\circ\text{C}$)	Ppk	1500	W	
Steady state power dissipation at $T_L= 75^\circ\text{C}$ lead lengths 9.5 mm (mounted on copper land area of 20mm^2)	Pd	6.0	W	
Peak forward surge current, 8.3 single half sine wave superimposed on Rated load (8.3ms single half sine wave, Duty cycle = 4 pulses per minute max.)	I _{FSM}	200	A	
Forward voltage @ $I_F=50\text{A}$ 300 μs square wave pulse (Unidirectional only)	V _F	$V_{BR}\leq 100\text{V}$	3.5	V
		$V_{BR}>100\text{V}$	5.0	
Operating and storage temperature range	T _J , T _{STG}	-55 to +175	$^\circ\text{C}$	

1500W TVS

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

Type number	Type number	Reverse standoff voltage	Breakdown voltage V _{BR} @ I _T		Test current I _T (mA)	Max.reverse leakage @ V _R (Note 1) I _R (μA)	Max. clamping voltage @ I _{pp} V _c (V)	Max. peak pulse current I _{PP} (A)	Max. voltage temp.variation of V _{BR} %/°C
			Min (V)	Max (V)					
Unidirectional	Bidirectional	V _{RWM} (V)	Min (V)	Max (V)	I _T (mA)	I _R (μA)	V _c (V)	I _{PP} (A)	%/°C
1.5KE6V8A	1.5KE6V8CA	5.8	6.45	7.14	10	1000	10.5	143	0.057
1.5KE7V5A	1.5KE7V5CA	6.4	7.13	7.88	10	500	11.3	132	0.061
1.5KE8V2A	1.5KE8V2CA	7.02	7.79	8.61	10	200	12.1	124	0.065
1.5KE9V1A	1.5KE9V1CA	7.78	8.65	9.55	1	50	13.4	112	0.068
1.5KE10A	1.5KE10CA	8.55	9.5	10.5	1	10	14.5	103	0.073
1.5KE11A	1.5KE11CA	9.4	10.5	11.6	1	5	15.6	96	0.075
1.5KE12A	1.5KE12CA	10.2	11.4	12.6	1	5	16.7	90	0.078
1.5KE13A	1.5KE13CA	11.1	12.4	13.7	1	5	18.2	82	0.081
1.5KE15A	1.5KE15CA	12.8	14.3	15.8	1	5	21.2	71	0.084
1.5KE16A	1.5KE16CA	13.6	15.2	16.8	1	5	22.5	67	0.086
1.5KE18A	1.5KE18CA	15.3	17.1	18.9	1	5	25.2	59.5	0.088
1.5KE20A	1.5KE20CA	17.1	19	21	1	5	27.7	54	0.09
1.5KE22A	1.5KE22CA	18.8	20.9	23.1	1	5	30.6	49	0.092
1.5KE24A	1.5KE24CA	20.5	22.8	25.2	1	5	33.2	45	0.094
1.5KE27A	1.5KE27CA	23.1	25.7	28.4	1	5	37.5	40	0.096
1.5KE30A	1.5KE30CA	25.6	28.5	31.5	1	5	41.4	36	0.097
1.5KE33A	1.5KE33CA	28.2	31.4	34.7	1	5	45.7	33	0.098
1.5KE36A	1.5KE36CA	30.8	34.2	37.8	1	5	49.9	30	0.099
1.5KE39A	1.5KE39CA	33.3	37.1	41	1	5	53.9	28	0.1
1.5KE43A	1.5KE43CA	36.8	40.9	45.2	1	5	59.3	25.3	0.101
1.5KE47A	1.5KE47CA	40.2	44.7	49.4	1	5	64.8	23.2	0.101
1.5KE51A	1.5KE51CA	43.6	48.5	53.6	1	5	70.1	21.4	0.102
1.5KE56A	1.5KE56CA	47.8	53.2	58.8	1	5	77	19.5	0.103
1.5KE62A	1.5KE62CA	53	58.9	65.1	1	5	85	17.7	0.104
1.5KE68A	1.5KE68CA	58.1	64.6	71.4	1	5	92	16.3	0.104
1.5KE75A	1.5KE75CA	64.1	71.3	78.8	1	5	103	14.6	0.105
1.5KE82A	1.5KE82CA	70.1	77.9	86.1	1	5	113	13.3	0.105
1.5KE91A	1.5KE91CA	77.8	86.5	95.5	1	5	125	12	0.106
1.5KE100A	1.5KE100CA	85.5	95	105	1	5	137	11	0.106
1.5KE110A	1.5KE110CA	94	105	116	1	5	152	9.9	0.107
1.5KE120A	1.5KE120CA	102	114	126	1	5	165	9.1	0.107
1.5KE130A	1.5KE130CA	111	124	137	1	5	179	8.4	0.107
1.5KE150A	1.5KE150CA	128	143	158	1	5	207	7.2	0.108
1.5KE160A	1.5KE160CA	136	152	168	1	5	219	6.8	0.108
1.5KE170A	1.5KE170CA	145	162	179	1	5	234	6.4	0.108
1.5KE180A	1.5KE180CA	154	171	189	1	5	246	6.1	0.108
1.5KE200A	1.5KE200CA	171	190	210	1	5	274	5.5	0.108
1.5KE220A	1.5KE220CA	185	209	231	1	5	328	4.6	0.108
1.5KE250A	1.5KE250CA	214	237	263	1	5	344	5	0.11
1.5KE300A	1.5KE300CA	256	285	315	1	5	414	5	0.11
1.5KE350A	1.5KE350CA	300	332	368	1	5	482	4	0.11
1.5KE400A	1.5KE400CA	342	380	420	1	5	548	4	0.11

Note:

1.For bi-directional devices having V_R of 10 volts and under, the I_R limit is doubled.

Typical Characteristics

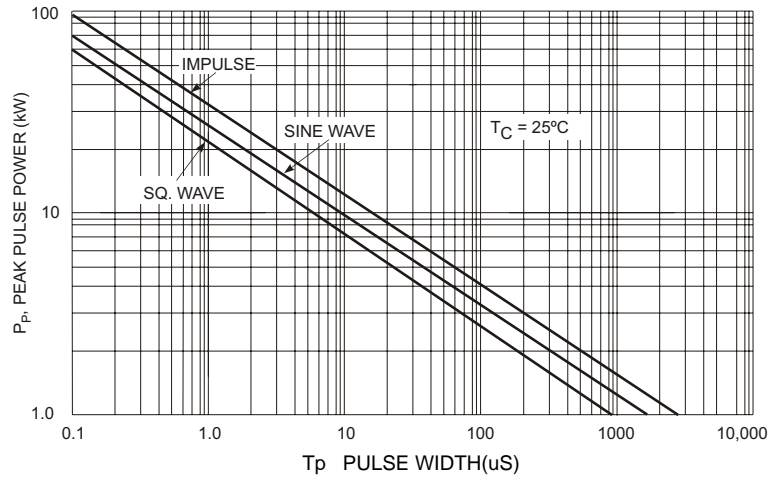


Fig.1 Pulse Rating Curve

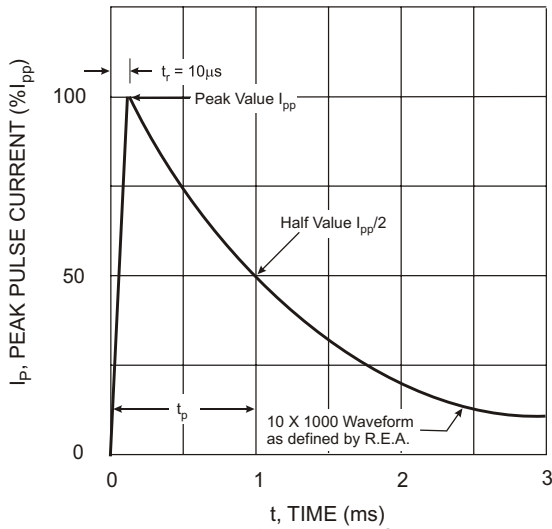


Fig.2 PulseWaveform

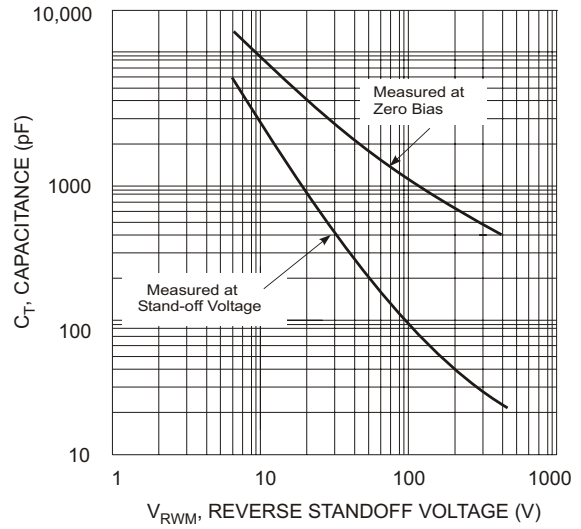


Fig.3 Typical Total Capacitance

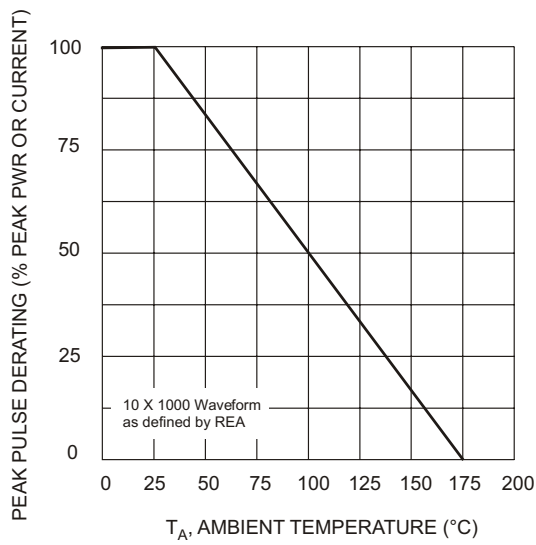


Fig.4 Pulse Derating Curve

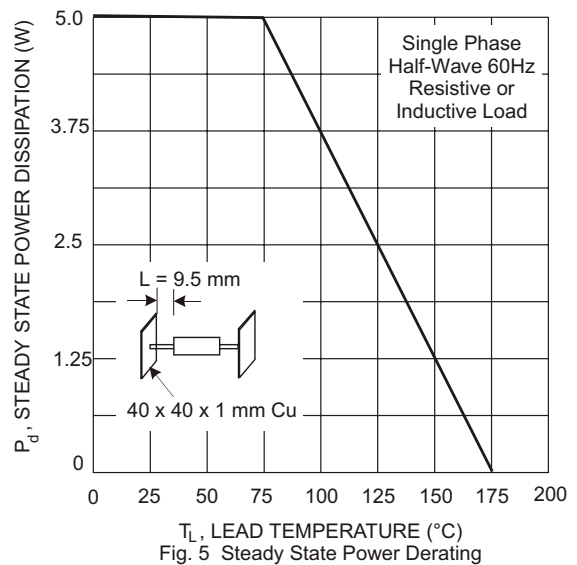


Fig.5 Steady State Power Derating