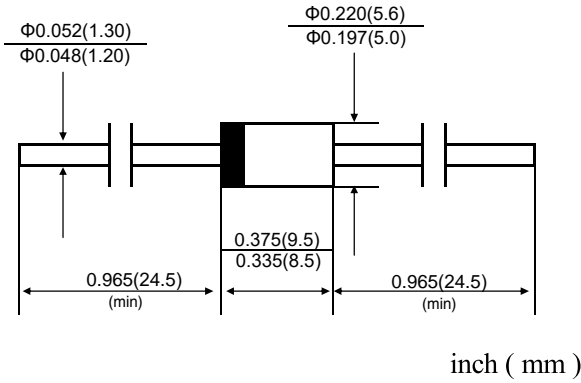


Outline Dimensions and Mark

DO-201AD(DO-27)



Features

P_{PPM} 1500W
V_{BR} 6.8-600V

- 600W Peak pulse power capability at 10/1000μs waveform
- Typical IR less than 1uA above 12V
- High temperature soldering: 260°C/10s
- Meet UL flammability classification 94V-0

Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Max
Peak power dissipation, with a 10/1000us waveform ⁽¹⁾	P _{PPM}	W	1500
Peak pulse current, with a 10/1000us waveform ⁽¹⁾	I _{PPM}	A	See Next Table
Power dissipation, on infinite heat sink at TL=75°C	P _D	W	6.5
Peak forward surge current, 8.3 ms single half sine-wave unidirectional only ⁽²⁾	I _{FSM}	A	200
Operating junction and storage temperature range	T _J , T _{STG}	°C	-55 to +150

Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Maximum instantaneous forward voltage at 35A for unidirectional only ⁽³⁾	V _{FM}	V	3.5/5.0

Notes:

- (1) Non-repetitive current pulse, per Fig. 3 and derated above T_A= 25°C per Fig.2.
- (2) Measured on 8.3ms single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum.
- (3) V_F=3.5V Max for devices of V_{BR}≤220V, and V_F=5.0V Max for devices of V_{BR}>220V.



1.5KE Series 1500W Transient Voltage Suppressor

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

Part Number (Uni)	Part Number (Bi)	Breakdown Voltage $V_{BR@I_T}$			Maximum Reverse Leakage $I_R @$ V_{WM} (μA)	Working Peak Reverse Voltage V_{RWM} (V)	Maximum Reverse Surge Current I_{PP} (A) ①	Maximum Clamping Voltage V_C @ I_{PP} (V)
		Min (V)	Max (V)	I_T (mA)				
1.5KE6.8A	1.5KE6.8CA	6.45	7.14	10	1000	5.8	143	10.5
1.5KE7.5A	1.5KE7.5CA	7.13	7.88	10	500	6.4	133	11.3
1.5KE8.2A	1.5KE8.2CA	7.79	8.61	10	200	7.02	124	12.1
1.5KE9.1A	1.5KE9.1CA	8.65	9.55	1	50	7.78	112	13.4
1.5KE10A	1.5KE10CA	9.5	10.5	1	10	8.55	103	14.5
1.5KE11A	1.5KE11CA	10.5	11.6	1	5	9.4	96.2	15.6
1.5KE12A	1.5KE12CA	11.4	12.6	1	5	10.2	89.8	16.7
1.5KE13A	1.5KE13CA	12.4	13.7	1	5	11.1	82.4	18.2
1.5KE15A	1.5KE15CA	14.3	15.8	1	1	12.8	70.8	21.2
1.5KE16A	1.5KE16CA	15.2	16.8	1	2	13.6	66.7	22.5
1.5KE18A	1.5KE18CA	17.1	18.9	1	1	15.3	59.5	25.2
1.5KE20A	1.5KE20CA	19	21	1	1	17.1	54.2	27.7
1.5KE22A	1.5KE22CA	20.9	23.1	1	1	18.8	49	30.6
1.5KE24A	1.5KE24CA	22.8	25.2	1	1	20.5	45.2	33.2
1.5KE27A	1.5KE27CA	25.7	28.4	1	1	23.1	40	37.5
1.5KE30A	1.5KE30CA	28.5	31.5	1	1	25.6	36.2	41.4
1.5KE33A	1.5KE33CA	31.4	34.7	1	1	28.2	32.8	45.7
1.5KE36A	1.5KE36CA	34.2	37.8	1	1	30.8	30.1	49.9
1.5KE39A	1.5KE39CA	37.1	41	1	1	33.3	27.8	53.9
1.5KE43A	1.5KE43CA	40.9	45.2	1	1	36.8	25.3	59.3
1.5KE47A	1.5KE47CA	44.7	49.4	1	1	40.2	23.1	64.8
1.5KE51A	1.5KE51CA	48.5	53.6	1	1	43.6	21.4	70.1
1.5KE56A	1.5KE56CA	53.2	58.8	1	1	47.8	19.5	77
1.5KE62A	1.5KE62CA	58.9	65.1	1	1	53	17.6	85
1.5KE68A	1.5KE68CA	64.6	71.4	1	1	58.1	16.3	92
1.5KE75A	1.5KE75CA	71.3	78.8	1	1	64.1	14.6	104
1.5KE82A	1.5KE82CA	77.9	86.1	1	1	70.1	13.3	113
1.5KE91A	1.5KE91CA	86.5	95.5	1	1	77.8	12	125
1.5KE100A	1.5KE100CA	95	105	1	1	85.5	10.9	137
1.5KE110A	1.5KE110CA	105	116	1	1	94	9.9	152
1.5KE120A	1.5KE120CA	114	126	1	1	102	9.1	165
1.5KE130A	1.5KE130CA	124	137	1	1	111	8.4	179
1.5KE150A	1.5KE150CA	143	158	1	1	128	7.2	207
1.5KE160A	1.5KE160CA	152	168	1	1	136	6.8	219
1.5KE170A	1.5KE170CA	162	179	1	1	145	6.4	234

1.5KE Series 1500W Transient Voltage Suppressor
ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$)

Part Number (Uni)	Part Number (Bi)	Breakdown Voltage $V_{BR}@I_T$			Maximum Reverse Leakage $I_R @$ V_{RWM} (μA)	Working Peak Reverse Voltage V_{RWM} (V)	Maximum Reverse Surge Current I_{PP} (A) ①	Maximum Clamping Voltage V_C @ I_{PP} (V)
		Min (V)	Max (V)	I_T (mA)				
1.5KE180A	1.5KE180CA	171	189	1	1	154	6.1	246
1.5KE200A	1.5KE200CA	190	210	1	1	171	5.5	274
1.5KE220A	1.5KE220CA	209	231	1	1	185	4.6	328
1.5KE250A	1.5KE250CA	237	263	1	1	214	4.4	344
1.5KE300A	1.5KE300CA	285	315	1	1	256	3.6	414
1.5KE350A	1.5KE350CA	333	368	1	1	300	3.1	482
1.5KE400A	1.5KE400CA	380	420	1	1	342	2.7	548
1.5KE440A	1.5KE440CA	418	462	1	1	376	2.5	602
1.5KE480A	1.5KE480CA	456	504	1	1	408	2.28	658
1.5KE500A	1.5KE500CA	475	525	1	1	427.5	2.17	690
1.5KE510A	1.5KE510CA	485	535	1	1	434	2.15	698
1.5KE520A	1.5KE520CA	494	546	1	1	444.6	2.09	717.6
1.5KE540A	1.5KE540CA	513	567	1	1	459	2.03	740
1.5KE550A	1.5KE550CA	522.5	577.5	1	1	470.3	1.98	759
1.5KE600A	1.5KE600CA	570	630	1	1	513	1.81	828

① Surge waveform:10/1000 μs

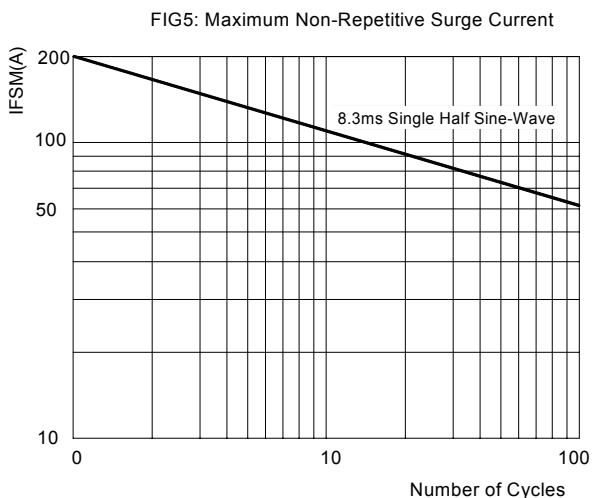
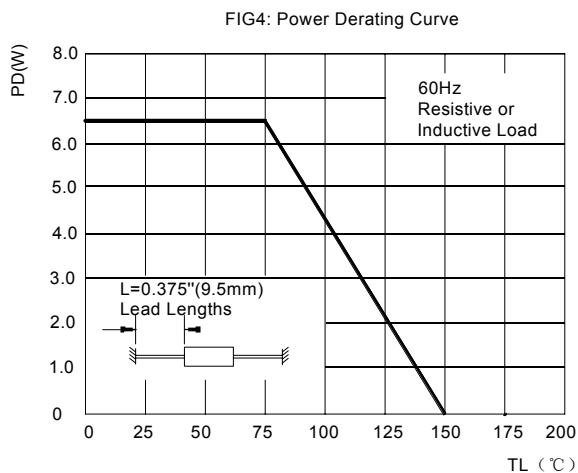
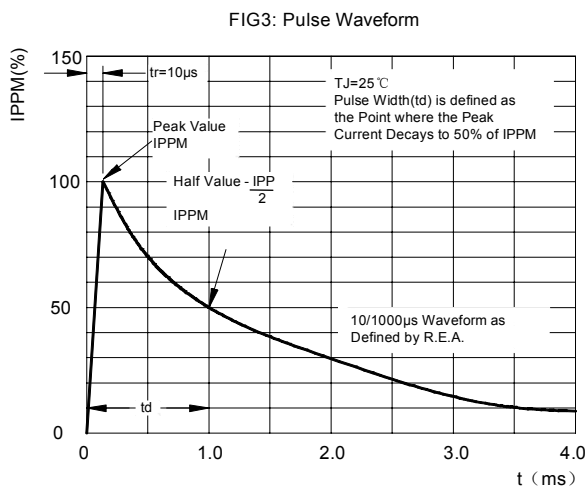
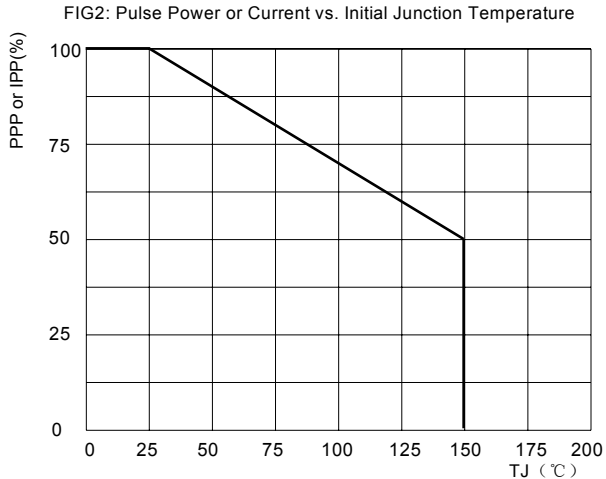
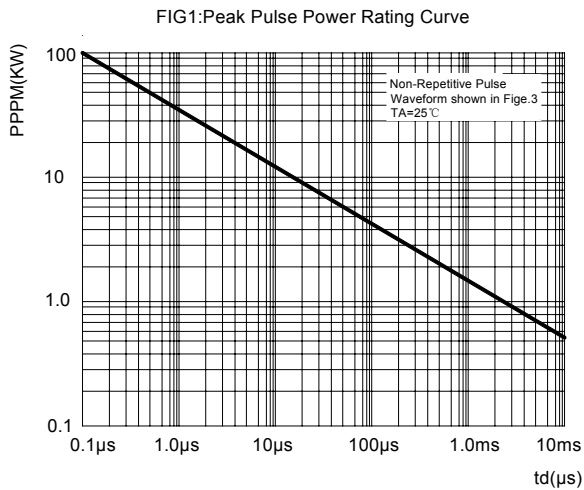
V_{RWM} : Stand-off voltage -- maximum voltage that can be applied

V_{BR} : Breakdown voltage

V_C : Clamping voltage -- peak voltage measured across the suppressor at a specified I_{PP}

I_R : Reverse leakage current

■ Characteristics(Typical)



The curve above is for reference only.

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