

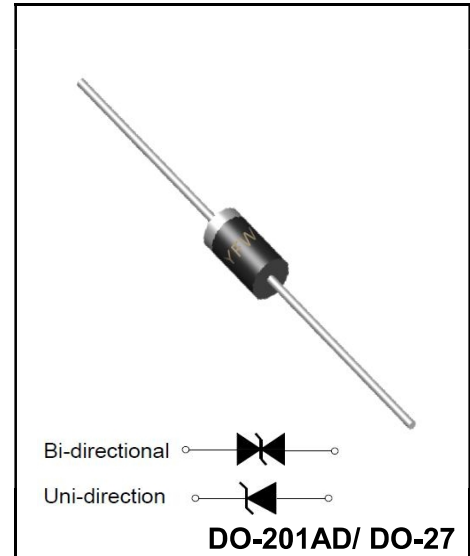
Transient voltage suppressor power 1500 watts

**FEATURES**

- ◆  $P_{PP}$  1500W
- ◆  $V_{RWM}$  6.8V~600V
- ◆ Glass passivated chip

**MECHANICAL DATA**

- ◆ Case: DO-201AD/ DO-27
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 0.98g / 0.0345oz



**Limiting Values(Absolute Maximum Rating)**

Parameter	Symbol	Conditions	Value	Unit
Peak power dissipation	$P_{PPM}$	with a 10/1000us waveform	1500	W
Peak forward surge current	$I_{FSM}$	8.3 ms single half sine-wave unidirectional only	200	A
Peak pulse current	$I_{PPM}$	with a 10/1000us waveform	See Next Table	A
Power dissipation	$P_D$	on infinite heat sink at $T_L=75^{\circ}C$	6.5	W
Operating junction and storage emperature range	$T_J, T_{STG}$		-55 to +175	$^{\circ}C$

**Electrical Characteristics( $T_a=25^{\circ}C$  Unless otherwise specified)**

Parameter	Symbol	Conditions	Value	Unit
Maximum instantaneous forward Voltage (1)	$P_{PPM}$	at 25A for unidirectional only	3.5/5.0	V
Thermal resistance	$R_{\theta JL}$	junction to lead	75	$^{\circ}C/W$
	$R_{\theta JA}$	junction to ambient, $L_{Lead} = 10\text{ mm}$	15.4	$^{\circ}C/W$

**NOTES:**

1.  $V_F = 3.5\text{ V}$  for 1.5KE220(A) and below;  $V_F = 5.0\text{ V}$  for 1.5KE250(A) and above

## Electrical Characteristics ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

Part Number		Reverse Stand-Off Voltage	Breakdown Voltage @IT		Test Current	Maximum Clamping Voltage @IPP	Peak Pulse Current	Reverse Leakage @VR
Uni.	Bi.	VR(V)	VB Min.(V)	VB Max.(V)	IT(mA)	VC(V)	IPP(A)	IR( A)
1.5KE6.8A	1.5KE6.8CA	5.80	6.45	7.14	10	10.5	144.8	1000
1.5KE7.5A	1.5KE7.5CA	6.40	7.13	7.88	10	11.3	134.5	500
1.5KE8.2A	1.5KE8.2CA	7.02	7.79	8.61	10	12.1	125.6	200
1.5KE9.1A	1.5KE9.1CA	7.78	8.65	9.55	1	13.4	113.4	50
1.5KE10A	1.5KE10CA	8.55	9.50	10.50	1	14.5	104.8	10
1.5KE11A	1.5KE11CA	9.40	10.50	11.60	1	15.6	97.4	5
1.5KE12A	1.5KE12CA	10.20	11.40	12.60	1	16.7	91.0	5
1.5KE13A	1.5KE13CA	11.10	12.40	13.70	1	18.2	83.5	1
1.5KE15A	1.5KE15CA	12.80	14.30	15.80	1	21.2	71.7	1
1.5KE16A	1.5KE16CA	13.60	15.20	16.80	1	22.5	67.6	1
1.5KE18A	1.5KE18CA	15.30	17.10	18.90	1	25.2	60.3	1
1.5KE20A	1.5KE20CA	17.10	19.00	21.00	1	27.7	54.9	1
1.5KE22A	1.5KE22CA	18.80	20.90	23.10	1	30.6	49.7	1
1.5KE24A	1.5KE24CA	20.50	22.80	25.20	1	33.2	45.8	1
1.5KE27A	1.5KE27CA	23.10	25.70	28.40	1	37.5	40.5	1
1.5KE30A	1.5KE30CA	25.60	28.50	31.50	1	41.4	36.7	1
1.5KE33A	1.5KE33CA	28.20	31.40	34.70	1	45.7	33.3	1
1.5KE36A	1.5KE36CA	30.80	34.20	37.80	1	49.9	30.5	1
1.5KE39A	1.5KE39CA	33.30	37.10	41.00	1	53.9	28.2	1
1.5KE43A	1.5KE43CA	36.80	40.90	45.20	1	59.3	25.6	1
1.5KE47A	1.5KE47CA	40.20	44.70	49.40	1	64.8	23.5	1
1.5KE51A	1.5KE51CA	43.60	48.50	53.60	1	70.1	21.7	1
1.5KE56A	1.5KE56CA	47.80	53.20	58.80	1	77.0	19.7	1
1.5KE62A	1.5KE62CA	53.00	58.90	65.10	1	85.0	17.9	1
1.5KE68A	1.5KE68CA	58.10	64.60	71.40	1	92.0	16.5	1
1.5KE75A	1.5KE75CA	64.10	71.30	78.80	1	103.0	14.8	1
1.5KE82A	1.5KE82CA	70.10	77.90	86.10	1	113.0	13.5	1
1.5KE91A	1.5KE91CA	77.80	86.50	95.50	1	125.0	12.2	1
1.5KE100A	1.5KE100CA	85.50	95.00	105.00	1	137.0	11.1	1
1.5KE110A	1.5KE110CA	94.00	105.00	116.00	1	152.0	10.0	1
1.5KE120A	1.5KE120CA	102.00	114.00	126.00	1	165.0	9.2	1
1.5KE130A	1.5KE130CA	111.00	124.00	137.00	1	179.0	8.5	1
1.5KE150A	1.5KE150CA	128.00	143.00	158.00	1	207.0	7.3	1
1.5KE160A	1.5KE160CA	136.00	152.00	168.00	1	219.0	6.9	1
1.5KE170A	1.5KE170CA	145.00	162.00	179.00	1	234.0	6.5	1
1.5KE180A	1.5KE180CA	154.00	171.00	189.00	1	246.0	6.2	1
1.5KE200A	1.5KE200CA	171.00	190.00	210.00	1	274.0	5.5	1
1.5KE220A	1.5KE220CA	185.00	209.00	231.00	1	328.0	4.6	1
1.5KE250A	1.5KE250CA	214.00	237.00	263.00	1	344.0	4.4	1
1.5KE300A	1.5KE300CA	256.00	285.00	315.00	1	414.0	3.7	1
1.5KE350A	1.5KE350CA	300.00	332.00	368.00	1	482.0	3.2	1
1.5KE400A	1.5KE400CA	342.00	380.00	420.00	1	548.0	2.8	1
1.5KE440A	1.5KE440CA	376.00	418.00	462.00	1	602.0	2.5	1
1.5KE480A	1.5KE480CA	408.00	456.00	504.00	1	658.0	2.3	1
1.5KE510A	1.5KE510CA	434.00	485.00	535.00	1	698.0	2.1	1
1.5KE530A	1.5KE530CA	450.00	503.50	556.50	1	725.0	2.1	1
1.5KE540A	1.5KE540CA	459.00	513.00	567.00	1	740.0	2.0	1
1.5KE550A	1.5KE550CA	467.00	522.50	577.50	1	760.0	2.0	1
1.5KE600A	1.5KE600CA	509.00	579.00	630.00	1	780.0	1.8	1

Notes:  
For bidirectional type having  $V_R$  of 10 volts and less, the  $I_R$  limit is double.

FIG1: Peak Pulse Power Rating Curve

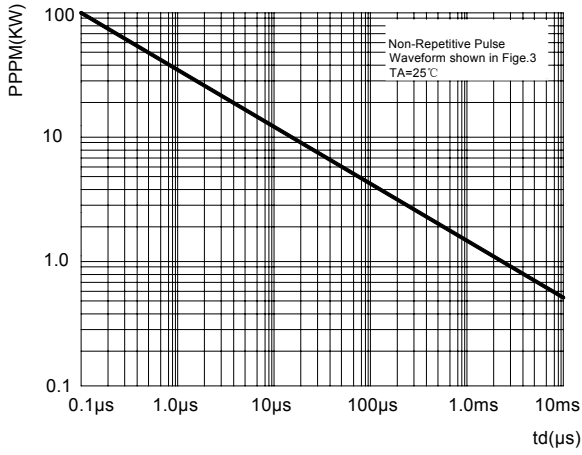


FIG2: Pulse Power or Current vs. Initial Junction Temperature

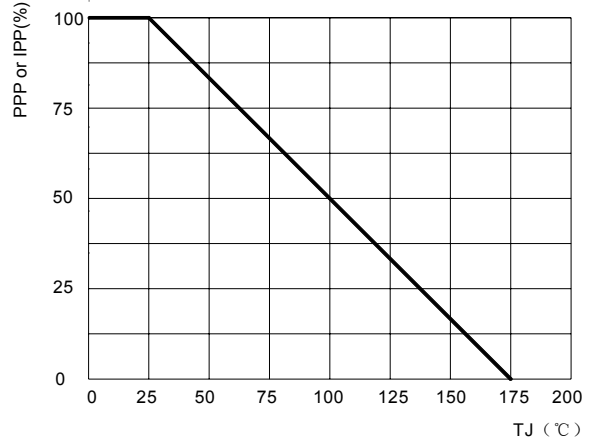


FIG3: Pulse Waveform

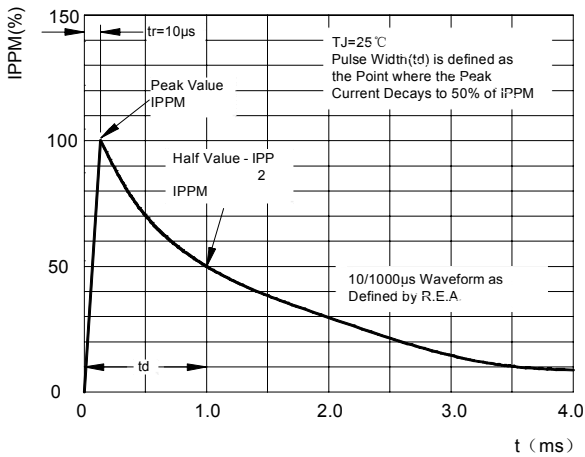


FIG4: Power Derating Curve

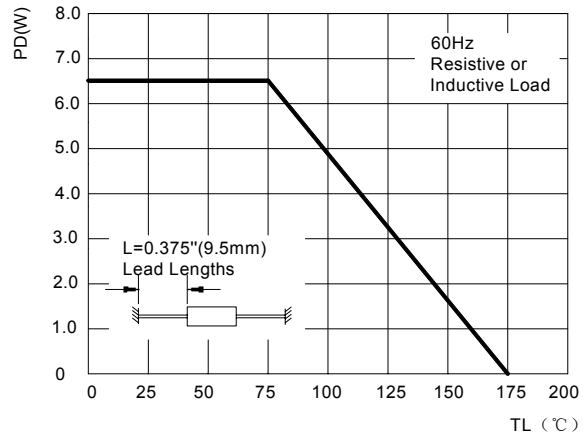


FIG5: Maximum Non-Repetitive Surge Current

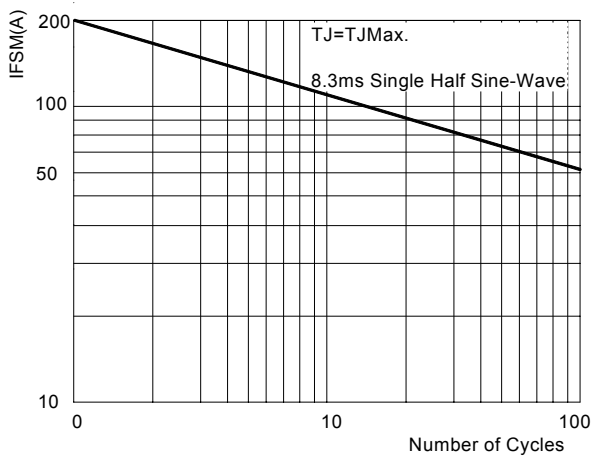
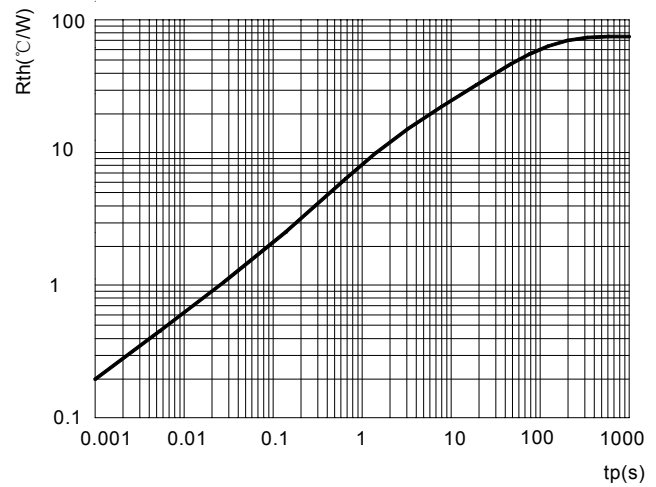


FIG6: Typical Transient Thermal Impedance



**Ordering information**

Package	Packing Description	Packing Quantity
DO-201AD/DO-27	bulk	250PCS/500PCS/Box 25000PCS/Carton
	braid	1000PCS/1250PCS/Box 10000PCS/Carton/12500PCS/Carton

**Package Dimensions**

**DO-201AD/DO-27**

Dim.	Millimeter(mm)		INCHES	
	Min.	Max.	Min.	Max.
A	-	9.50	-	0.370
B	-	6.40	-	0.250
C	1.20	1.30	0.048	0.052
D	25.4	-	1.00	-

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