



# Silicon Avalanche Diodes

## 1500 Watt Axial Leaded Transient Voltage Suppressors

### RoHS 1.5KE Series



#### ELECTRICAL SPECIFICATION @ Tamb 25°C

Part Numbers		Reverse Stand off Voltage V <sub>R</sub> (Volts)	Breakdown Voltage V <sub>BR</sub> (Volts) @ I <sub>T</sub>		Test Current I <sub>T</sub> (mA)	Maximum Clamping Voltage V <sub>C</sub> @ I <sub>PP</sub> (Volts)	Maximum Peak Pulse Current I <sub>PP</sub> (A)	Maximum Reverse Leakage I <sub>R</sub> @ V <sub>R</sub> (µA)
			MIN	MAX				
Uni-Polar	Bi-Polar							
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	9.50	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	5
1.5KE15A	1.5KE15CA	12.80	14.30	15.80	1	21.2	71.7	5
1.5KE16A	1.5KE16CA	13.60	15.20	16.80	1	22.5	67.6	5
1.5KE18A	1.5KE18CA	15.30	17.10	18.90	1	25.2	60.3	5
1.5KE20A	1.5KE20CA	17.10	19.00	21.00	1	27.7	54.9	5
1.5KE22A	1.5KE22CA	18.80	20.90	23.10	1	30.6	49.7	5
1.5KE24A	1.5KE24CA	20.50	22.80	25.20	1	33.2	45.8	5
1.5KE27A	1.5KE27CA	23.10	25.70	28.40	1	37.5	40.5	5
1.5KE30A	1.5KE30CA	25.60	28.50	31.50	1	41.4	36.7	5
1.5KE33A	1.5KE33CA	28.20	31.40	34.70	1	45.7	33.3	5
1.5KE36A	1.5KE36CA	30.80	34.20	37.80	1	49.9	30.5	5
1.5KE39A	1.5KE39CA	33.30	37.10	41.00	1	53.9	28.2	5
1.5KE43A	1.5KE43CA	36.80	40.90	45.20	1	59.3	25.6	5
1.5KE47A	1.5KE47CA	40.20	44.70	49.40	1	64.8	23.5	5
1.5KE51A	1.5KE51CA	43.60	48.50	53.60	1	70.1	21.7	5
1.5KE56A	1.5KE56CA	47.80	53.20	58.80	1	77.0	19.7	5
1.5KE62A	1.5KE62CA	53.00	58.90	65.10	1	85.0	17.9	5
1.5KE68A	1.5KE68CA	58.10	64.60	71.40	1	92.0	16.5	5
1.5KE75A	1.5KE75CA	64.10	71.30	78.80	1	103.0	14.8	5
1.5KE82A	1.5KE82CA	70.10	77.90	86.10	1	113.0	13.5	5
1.5KE91A	1.5KE91CA	77.80	86.50	95.50	1	125.0	12.2	5
1.5KE100A	1.5KE100CA	85.50	95.00	105.00	1	137.0	11.1	5
1.5KE110A	1.5KE110CA	94.00	105.00	116.00	1	152.0	10.0	5
1.5KE120A	1.5KE120CA	102.00	114.00	126.00	1	165.0	9.2	5
1.5KE130A	1.5KE130CA	111.00	124.00	137.00	1	179.0	8.5	5
1.5KE150A	1.5KE150CA	128.00	143.00	158.00	1	207.0	7.3	5
1.5KE160A	1.5KE160CA	136.00	152.00	168.00	1	219.0	6.9	5
1.5KE170A	1.5KE170CA	145.00	162.00	179.00	1	234.0	6.5	5
1.5KE180A	1.5KE180CA	154.00	171.00	189.00	1	246.0	6.2	5
1.5KE200A	1.5KE200CA	171.00	190.00	210.00	1	274.0	5.5	5
1.5KE220A	1.5KE220CA	185.00	209.00	231.00	1	328.0	4.6	5
1.5KE250A	1.5KE250CA	214.00	237.00	263.00	1	344.0	4.4	5
1.5KE300A	1.5KE300CA	256.00	285.00	315.00	1	414.0	3.7	5
1.5KE350A	1.5KE350CA	300.00	332.00	368.00	1	482.0	3.2	5
1.5KE400A	1.5KE400CA	342.00	380.00	420.00	1	548.0	2.8	5
1.5KE440A	1.5KE440CA	376.00	418.00	462.00	1	602.0	2.5	5
1.5KE480A	1.5KE480CA	408.00	456.00	504.00	1	658.0	2.3	5
1.5KE510A	1.5KE510CA	434.00	485.00	535.00	1	698.0	2.1	5
1.5KE530A	1.5KE530CA	450.00	503.50	556.50	1	725.0	2.1	5
1.5KE540A	1.5KE540CA	459.00	513.00	567.00	1	740.0	2.0	5
1.5KE550A	1.5KE550CA	467.00	522.50	577.50	1	760.0	2.0	5

For bidirectional type having V<sub>RM</sub> of 10 volts and less, the I<sub>R</sub> limit is double.  
 For parts without A , the V<sub>BR</sub> is ± 10%

6 SILICON DIODE ARRAYS

# Silicon Avalanche Diodes

## 1500 Watt Axial Leaded Transient Voltage Suppressors

### RoHS 1.5KE Series



Ratings and Characteristic Curves  $T_A=25^\circ\text{C}$  unless otherwise noted

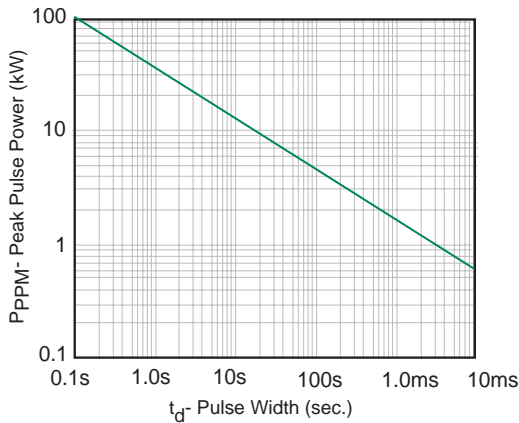


Fig. 1 Peak Pulse Power Rating Curve

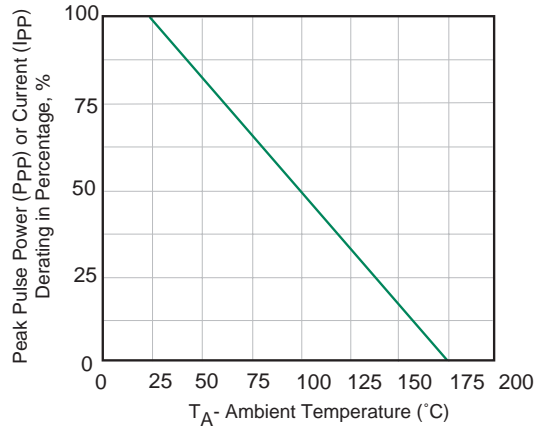


Fig. 2 Pulse Derating Curve

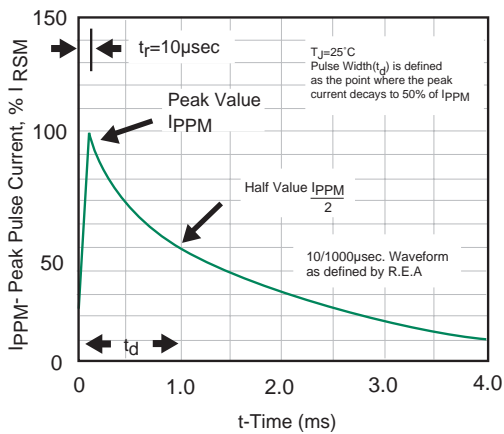


Fig. 3 Pulse Waveform

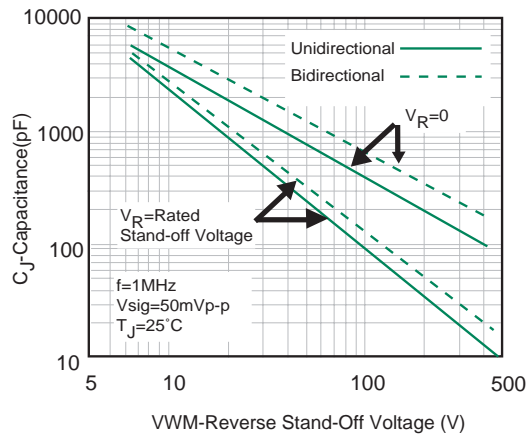


Fig. 4- Typical Junction Capacitance

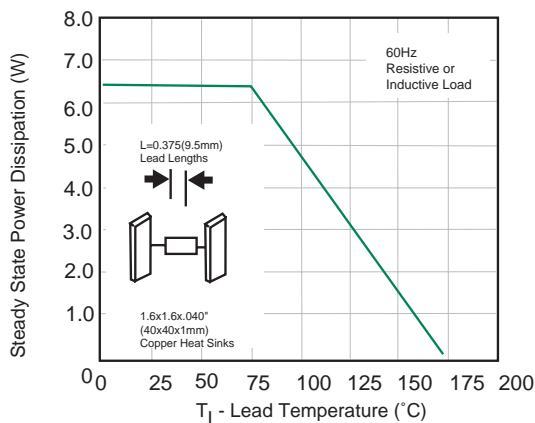


Fig. 5 Steady State Power Derating Curve

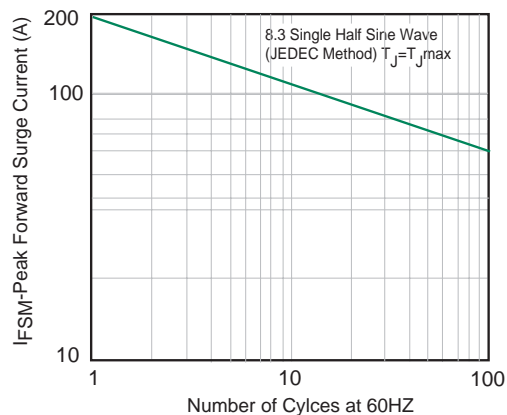


Fig. 6- Maximum Non-Repetitive Forward Surge Current Uni-Directional Only

# Silicon Avalanche Diodes

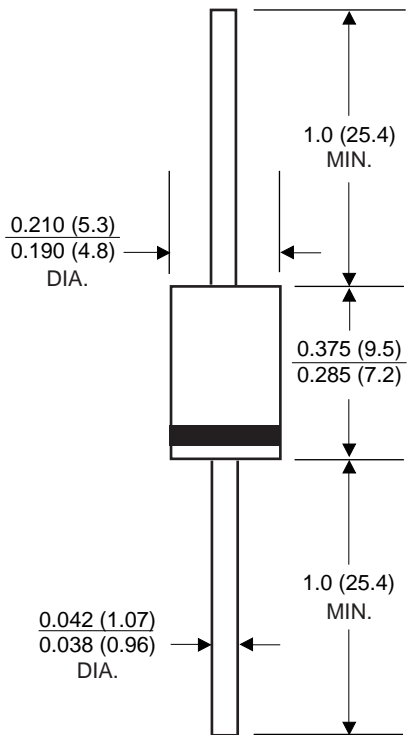
## 1500 Watt Axial Leaded Transient Voltage Suppressors

### RoHS 1.5KE Series



#### Outline Dimensions

Case Style 1.5KE  
(DO-201)



Dimensions in inches and (millimeters)

6  
SILICON DIODE  
ARRAYS