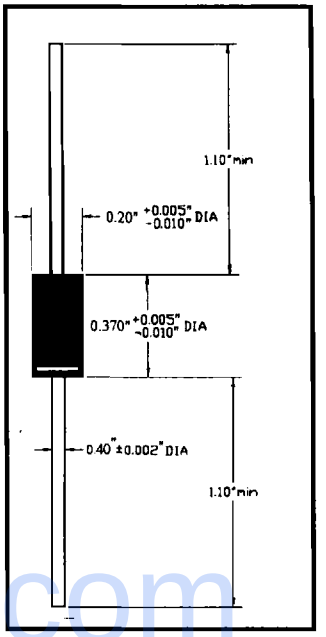
1.5KE6.8A
thru
1.5KE400A

1500 WATT SILICON TRANSIENT SUPPRESSOR DIODES

AVAILABLE IN VOLTAGES FROM 6.8 V THRU 400 V

PACKAGE OUTLINE



The **NES** 1.5KE6.8A to 1.5KE400A series of Silicon Transient Voltage Suppressor Diode has a pulse power rating of 1500 watts for one millisecond. The response time of TVS diode clamping action is theoretically instantaneous (1 x 10^{-12} sec.); therefore, they can protect Integrated Circuits, MOS devices, Hybrids, and other voltage-sensitive semiconductors and components. TVS diodes can also be used in series or parallel to increase the peak power ratings. This series of Silicon Transient Suppressors is used in applications where large voltage transients can permanently damage voltage-sensitive components.

MAXIMUM RATINGS:

1500 Watts of Peak Pulse Power Dissipation @ 25° C

Steady State Power Dissipation: 5.0 watts @ T_L = 75°C

Lead Length = 3/8"

Operating and Storage Temperature: -35°C to +150°C

Forward Surge Current: 200A,

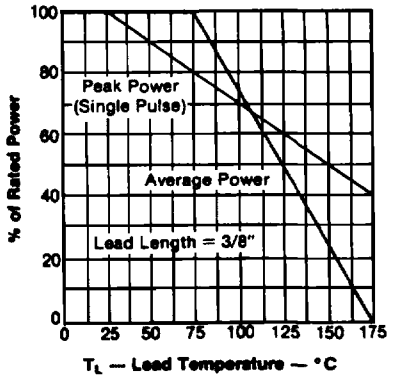
1/120 sec half cycle @ 25°C (Unidirectional only)

Repetition rate (duty cycle): 0.01%

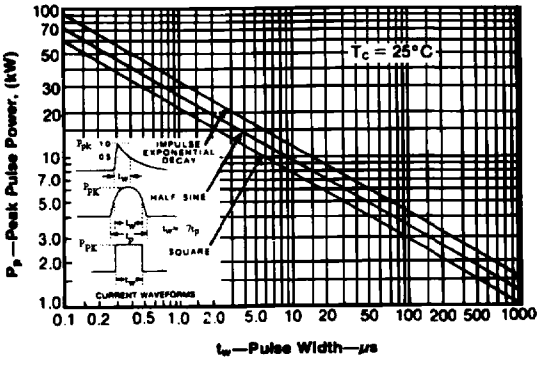
FEATURES:

- 1500 WATTS PEAK POWER DISSIPATION
- AVAILABLE IN RANGES FROM 6.8 TO 400 VOLTS
- MOLDED EPOXY CASE
- MATTE TIN PLATED
- POLARITY BAND DESIGNATES CATHODE
- CUSTOM DESIGNS AVAILABLE ~ CONSULT FACTORY

Power Derating Curve



Peak Pulse Power vs Pulse Time



NE012 1/96

1.5KE6.8A thru 1.5KE400A

JEDEC Type Number	Part Number*	Reverse Stand-off voltage V_R volts	Breakdown Voltage BV volts	@I_T mA	Maximum clamping volt @ I_{PP} Vc Volts	Maximum Reverse Leakage I_R @ V_R µA	Maximum Peak Pulse Current I_{PP} A	Maximum Volt. Temp. Var of BV mV/ ^{0}C
1N6267A	1.5KE6.8A	5.80	6.8	10	10.5	1000	143.0	5.0
1N6268A	1.5KE7.5A	6.40	7.5	10	11.3	500	132.0	5.0
1N6269A	1.5KE8.2A	7.02	8.2	10	12.1	200	124.0	6.0
1N6270A	1.5KE9.1A	7.78	9.1	1	13.4	50	112.0	7.0
1N6271A	1.5KE10A	8.55	10.0	1	14.5	10	103.0	8.0
1N6272A	1.5KE11A	9.40	11.0	1	15.6	5	96.0	9.0
1N6273A	1.5KE12A	10.20	12.0	1	16.7	5	90.0	10.0
1N6274A	1.5KE13A	11.10	13.0	1	18.2	5	82.0	11.0
1N6275A	1.5KE15A	12.80	15.0	1	21.2	5	71.0	12.0
1N6276A	1.5KE16A	13.60	16.0	1	22.5	5	67.0	14.0
1N6277A	1.5KE18A	15.30	18.0	1	25.2	5	59.5	19.0
1N6278A	1.5KE20A	17.10	20.0	1	27.7	5	54.0	19.0
1N6279A	1.5KE22A	18.80	22.0	1	30.6	5	49.0	20.0
1N6280A	1.5KE24A	20.50	24.0	1	33.2	5	45.0	23.0
1N6281A	1.5KE27A	23.10	27.0	1	37.5	5	40.0	25.0
1N6282A	1.5KE30A	25.60	30.0	1	41.4	5	36.0	28.0
1N6283A	1.5KE33A	28.20	33.0	1	45.7	5	33.0	30.0
1N6284A	1.5KE36A	30.80	36.0	1	49.9	5	30.0	31.0
1N6285A	1.5KE39A	33.30	39.0	1	53.9	5	28.0	36.0
1N6286A	1.5KE43A	36.80	43.0	1	59.3	5	25.3	44.0
1N6287A	1.5KE47A	40.20	47.0	1	64.8	5	23.2	48.0
1N6288A	1.5KE51A	43.60	51.0	1	70.1	5	21.4	51.0
1N6289A	1.5KE56A	47.80	56.0	1	77.0	5	19.5	56.0
1N6290A	1.5KE62A	53.00	62.0	1	85.0	5	17.7	62.0
1N6291A	1.5KE68A	58.10	68.0	1	92.0	5	16.3	69.0
1N6292A	1.5KE75A	64.10	75.0	1	103.0	5	14.6	76.0
1N6293A	1.5KE82A	70.10	82.0	1	113.0	5	13.3	86.0
1N6294A	1.5KE91A	77.80	91.0	1	125.0	5	12.0	94.0
1N6295A	1.5KE100A	85.50	100.0	1	137.0	5	11.0	104.0
1N6296A	1.5KE110A	94.00	110.0	1	152.0	5	9.9	115.0
1N6297A	1.5KE120A	102.00	120.0	1	165.0	5	9.1	125.0
1N6298A	1.5KE130A	111.00	130.0	1	179.0	5	8.4	136.0
1N6299A	1.5KE150A	128.00	150.0	1	207.0	5	7.2	157.0
1N6300A	1.5KE160A	136.00	160.0	1	219.0	5	6.8	167.0
1N6301A	1.5KE170A	145.00	170.0	1	234.0	5	6.4	188.0
1N6302A	1.5KE180A	154.00	180.0	1	246.0	5	6.1	188.0
1N6303A	1.5KE200A	171.00	200.0	1	274.0	5	5.5	209.0
	1.5KE220A	185.00	220.0	1	328.0	5	4.6	230.0
	1.5KE250A	214.00	250.0	1	344.0	5	5.0	260.0
	1.5KE300A	256.00	300.0	1	414.0	5	5.0	315.0
	1.5KE350A	300.00	350.0	1	482.0	5	4.0	368.0
	1.5KE400A	342.00	400.0	1	548.0	5	4.0	420.0

*Suffix 'A' indicates ±5% tolerance

*No Suffix indicates ±10% tolerance