

20KP33CA
thru
20KP280CA

20,000 WATT TRANSIENT VOLTAGE SUPPRESSOR

AVAILABLE IN VOLTAGES FROM 38.6V THRU 327.5V

The NES 20KP series of transient suppressor diodes are designed to protect electronic equipment from failure due to high voltage transients. Because of their special internal design, rapid junction cooling under pulse power stress is possible. This characteristic makes these devices especially useful in the protection of airborne, telephone and other industrial types of equipment normally subject to large voltage transients. As protective devices they are intended to be used as voltage clamps under sustained voltage stress until normal fusing devices open the circuits. The normal failure mode under sustained current overload is short circuit.

MAXIMUM RATINGS:

20,000 Watts of Peak Pulse Power Dissipation @ 25° C

clamping (0 volts to BV min): $< 1 \times 10^{-12}$ seconds

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

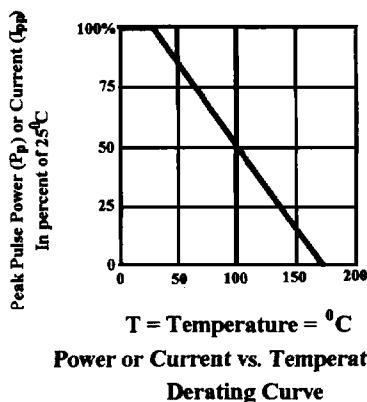
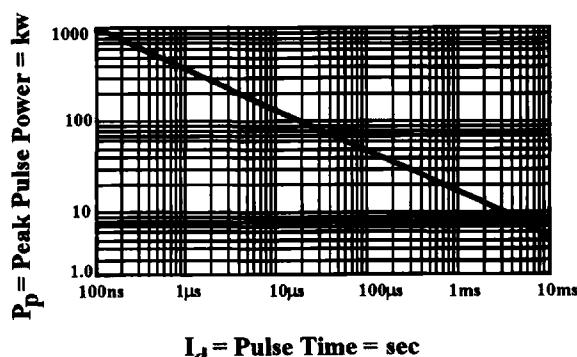
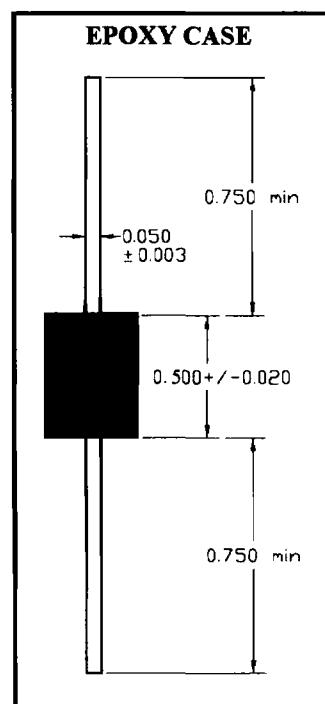
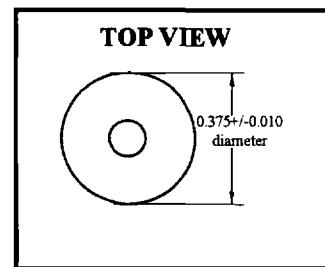
Steady State Power Dissipation: 7.0 watts @ $T_A = 25^{\circ}C$

Duty Cycle: 0.05%

FEATURES:

- EPOXY CASE
- MATTE TIN PLATED COPPER LEADS
- BIPOLAR DESIGN
- CUSTOM DESIGNS AVAILABLE*

* CONSULT FACTORY



NEW ENGLAND SEMICONDUCTOR

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Part Number*	Reverse Stand-off voltage V _R volts	Breakdown Voltage BV @ volts	I _T mA	Maximum clamping volt @ I _{PP} (1mSec) V _c Volts	Maximum Reverse Leakage I _R @ V _R μA	Maximum Peak Pulse Current I _{PP} A	Max. Volt. Temp. Var of BV mV/°C
20KP33CA	33	38.6	5	54.8	10	274	38
20KP36CA	36	42.1	5	59.7	10	251	41
20KP40CA	40	46.7	5	65.8	10	228	46
20KP43CA	43	50.3	5	69.7	10	215	50
20KP46CA	46	52.6	5	73.0	10	205	52
20KP48CA	48	56.1	5	77.7	10	193	56
20KP51CA	51	60.1	5	82.8	10	181	60
20KP54CA	54	63.1	5	87.5	10	171	63
20KP58CA	58	67.8	5	94.0	10	160	68
20KP60CA	60	70.2	5	97.3	10	154	71
20KP64CA	64	74.8	5	104.0	10	144	76
20KP70CA	70	81.9	5	114.0	10	132	83
20KP75CA	75	87.7	5	122.0	10	123	89
20KP78CA	78	91.2	5	126.0	10	119	93
20KP85CA	85	99.2	5	137.0	10	109	102
20KP90CA	90	105.5	5	146.0	10	103	109
20KP100CA	100	117.0	5	162.0	10	93	121
20KP110CA	110	128.5	5	178.0	10	84	133
20KP120CA	120	140.0	5	193.0	10	78	145
20KP130CA	130	151.5	5	209.0	10	72	157
20KP150CA	150	176.0	5	243.0	10	62	183
20KP160CA	160	187.5	5	259.0	10	58	195
20KP170CA	170	199.0	5	275.0	10	55	207
20KP180CA	180	210.5	5	291.0	10	52	219
20KP200CA	200	233.5	5	322.0	10	47	243
20KP220CA	220	258.0	5	356.0	10	42	269
20KP240CA	240	281.0	5	388.0	10	39	293
20KP260CA	260	304.0	5	419.0	10	36	317
20KP280CA	280	327.5	5	452.0	10	33	342

*Suffix 'CA' indicates ±5% tolerance

*Suffix 'C' indicates ±10% tolerance