

5KP5.0CA  
thru  
5KP110CA

# 5000 WATT SILICON VOLTAGE TRANSIENT SUPPRESSOR

AVAILABLE IN VOLTAGES FROM 6.7V THRU 128V

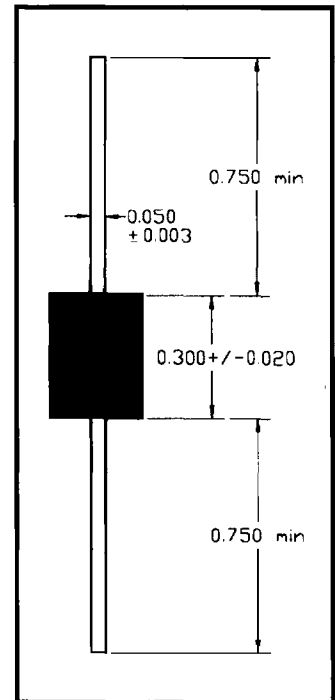
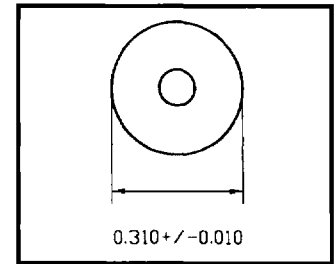
The NES 5KP5.0C to 5KP110CA series of transient suppressor diodes are designed to protect electronic equipment from failure due to over voltage transients. The devices are intended to perform as voltage clamps under sustained over voltage stress until slower conventional fuses open the circuit. The initial failure mode under sustained avalanche current overload is short circuit. Avalanche characteristics and rapid junction cooling under pulse power stress enables a wide variety of airborne, telephone and other critical equipment to be protected from large transients.

### MAXIMUM RATINGS:

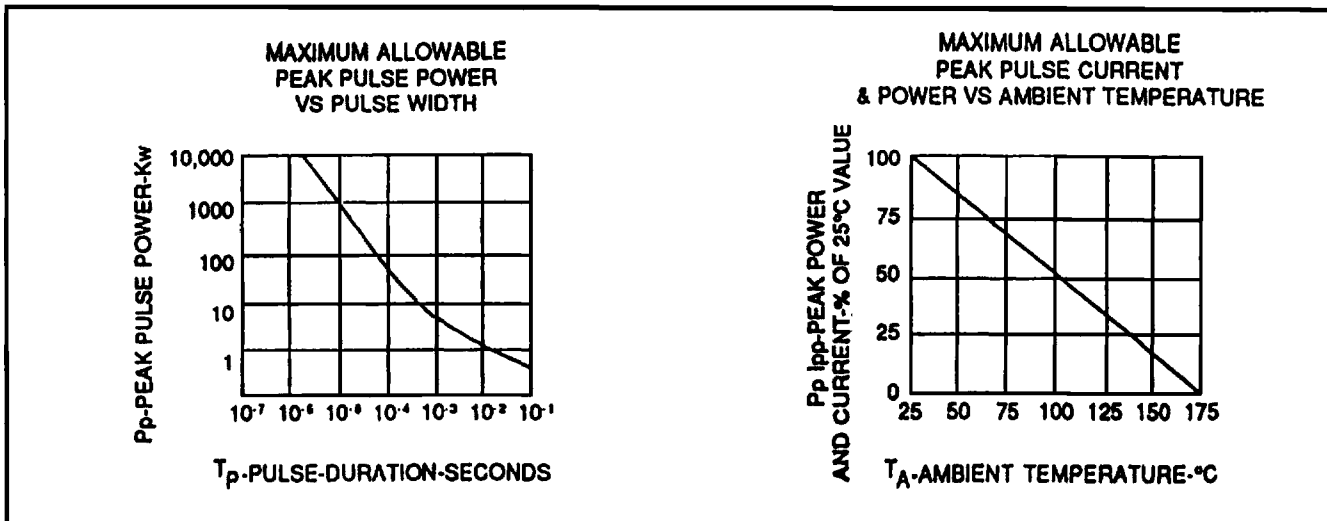
- 5000 Watts of Peak Pulse Power Dissipation @  $T_A = 25^\circ C$
- D C Power Dissipation: 5.0 Watts @  $T_A = 25^\circ C$
- Clamping Time  $< 1 \times 10^{-12}$ seconds
- 8.3 msec (60Hz) Forward Surge Current Rating 500 Amps
- $T_{opr}$  and  $T_{sig}$   $-65^\circ C$  to  $+175^\circ C$

### FEATURES:

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



\*CONSULT FACTORY



# NEW ENGLAND SEMICONDUCTOR

## 5KP5.0CA thru 5KP110CA

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 $I_R @ V_R$ $\mu A$	Maximum Peak Pulse Current $I_{PP}$ A	Max. Volt. Temp. Var of BV mV/C
5KP5.0CA	5.0	6.7	50	9.2	2000	543	4.0
5KP6.0CA	6.0	6.9	50	10.3	5000	485	4.0
5KP6.5CA	6.5	7.6	50	11.2	2000	447	4.0
5KP7.0CA	7.0	8.2	50	12.0	1000	417	5.0
5KP7.5CA	7.5	8.8	5	12.9	250	388	6.0
5KP8.0CA	8.0	9.4	5	13.6	150	367	6.0
5KP8.5CA	8.5	9.9	5	14.4	50	347	7.0
5KP9.0CA	9.0	10.5	5	15.4	20	325	8.0
5KP10CA	10	11.2	5	17.0	15	294	9.0
5KP11CA	11	12.8	5	18.2	10	274	10
5KP12CA	12	14.0	5	19.9	10	251	11
5KP13CA	13	15.1	5	21.5	10	232	12
5KP14CA	14	16.4	5	23.2	10	215	13
5KP15CA	15	17.6	5	24.4	10	206	15
5KP16CA	16	18.7	5	26.0	10	192	16
5KP17CA	17	19.9	5	27.6	10	181	18
5KP18CA	18	21.0	5	29.2	10	172	19
5KP20CA	20	23.3	5	32.4	10	154	22
5KP22CA	22	25.6	5	35.5	10	141	24
5KP24CA	24	28.1	5	38.9	10	128	27
5KP26CA	26	30.4	5	42.1	10	119	29
5KP28CA	28	32.7	5	45.4	10	110	30
5KP30CA	30	35.0	5	48.4	10	103	35
5KP33CA	33	38.6	5	53.3	10	94	38
5KP36CA	36	42.1	5	60.1	10	86	40
5KP40CA	40	46.7	5	64.5	10	78	45
5KP43CA	43	50.3	5	69.4	10	72	49
5KP45CA	45	52.6	5	72.7	10	69	51
5KP48CA	48	56.1	5	77.4	10	65	55
5KP51CA	51	58.7	5	82.4	10	61	60
5KP54CA	54	63.1	5	87.1	10	57	64
5KP58CA	58	67.3	5	93.6	10	53	69
5KP60CA	60	70.2	5	96.8	10	52	70
5KP64CA	64	74.8	5	103.0	10	49	75
5KP70CA	70	81.9	5	113.0	10	44	84
5KP75CA	75	87.7	5	121.0	10	41	90
5KP78CA	78	91.2	5	126.0	10	40	94
5KP85CA	85	99.2	5	137.0	10	36	102
5KP90CA	90	105.5	5	146.0	10	34	109
5KP100CA	100	117.0	5	162.0	10	31	122
5KP110CA	110	128.0	5	177	10	28	132

\*Suffix 'CA' indicates  $\pm 5\%$  tolerance

\*Suffix 'C' indicates  $\pm 10\%$  tolerance