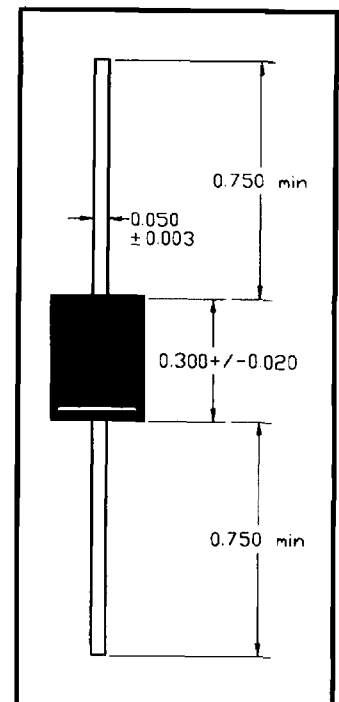
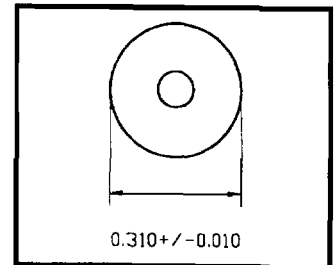


5KP5.0A
thru
5KP110A

5000 WATT SILICON VOLTAGE TRANSIENT SUPPRESSOR

AVAILABLE IN VOLTAGES FROM 6.7V THRU 128V

The NES 5KP5.0 to 5KP110A 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 over load 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.



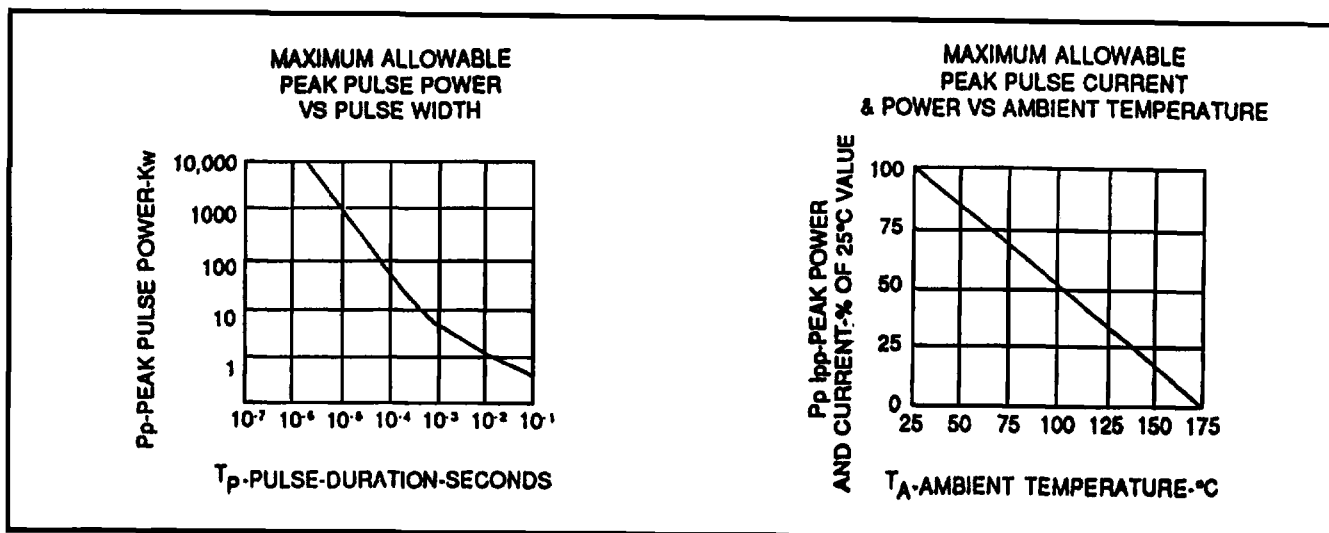
MAXIMUM RATINGS:

- 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
- Forward Voltage Drop 2.0 Volts Max. @ 100 Amps
- T_{opr} and T_{stg} $-65^\circ C$ to $+175^\circ C$

FEATURES:

- EPOXY CASE
- MATTE TIN PLATED COPPER LEADS
- POLARITY BAND DENOTES CATHODE END
- MONOPOLAR DESIGN
- CUSTOM DESIGNS AVAILABLE*

*CONSULT FACTORY



NEW ENGLAND SEMICONDUCTOR

5KP5.0A thru 5KP110A

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
5KP5.0A	5.0	6.7	50	9.2	2000	543	4.0
5KP6.0A	6.0	6.9	50	10.3	5000	485	4.0
5KP6.5A	6.5	7.6	50	11.2	2000	447	4.0
5KP7.0A	7.0	8.2	50	12.0	1000	417	5.0
5KP7.5A	7.5	8.8	5	12.9	250	388	6.0
5KP8.0A	8.0	9.4	5	13.6	150	367	6.0
5KP8.5A	8.5	9.9	5	14.4	50	347	7.0
5KP9.0A	9.0	10.5	5	15.4	20	325	8.0
5KP10A	10	11.2	5	17.0	15	294	9.0
5KP11A	11	12.8	5	18.2	10	274	10
5KP12A	12	14.0	5	19.9	10	251	11
5KP13A	13	15.1	5	21.5	10	232	12
5KP14A	14	16.4	5	23.2	10	215	13
5KP15A	15	17.6	5	24.4	10	206	15
5KP16A	16	18.7	5	26.0	10	192	16
5KP17A	17	19.9	5	27.6	10	181	18
5KP18A	18	21.0	5	29.2	10	172	19
5KP20A	20	23.3	5	32.4	10	154	22
5KP22A	22	25.6	5	35.5	10	141	24
5KP24A	24	28.1	5	38.9	10	128	27
5KP26A	26	30.4	5	42.1	10	119	29
5KP28A	28	32.7	5	45.4	10	110	30
5KP30A	30	35.0	5	48.4	10	103	35
5KP33A	33	38.6	5	53.3	10	94	38
5KP36A	36	42.1	5	60.1	10	86	40
5KP40A	40	46.7	5	64.5	10	78	45
5KP43A	43	50.3	5	69.4	10	72	49
5KP45A	45	52.6	5	72.7	10	69	51
5KP48A	48	56.1	5	77.4	10	65	55
5KP51A	51	58.7	5	82.4	10	61	60
5KP54A	54	63.1	5	87.1	10	57	64
5KP58A	58	67.3	5	93.6	10	53	69
5KP60A	60	70.2	5	96.8	10	52	70
5KP64A	64	74.8	5	103.0	10	49	75
5KP70A	70	81.9	5	113.0	10	44	84
5KP75A	75	87.7	5	121.0	10	41	90
5KP78A	78	91.2	5	126.0	10	40	94
5KP85A	85	99.2	5	137.0	10	36	102
5KP90A	90	105.5	5	146.0	10	34	109
5KP100A	100	117.0	5	162.0	10	31	122
5KP110A	110	128.0	5	177	10	28	132

*Suffix 'A' indicates $\pm 5\%$ tolerance
No Suffix indicates $\pm 10\%$ tolerance