

# SUSSEX

SEMICONDUCTOR, INC.

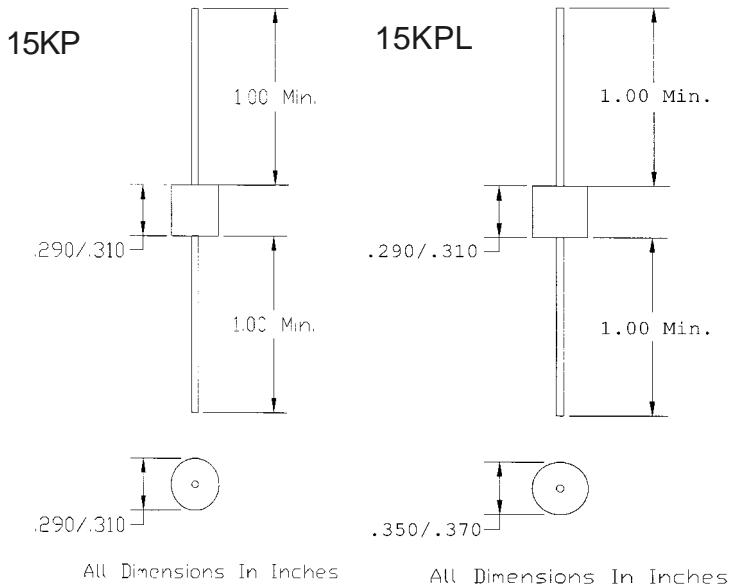
12251 TOWNE LAKE DRIVE, FORT MYERS, FLORIDA, 33913 • TEL: (239) 768-6800 • FAX: (239) 768-6868

## 15KP SERIES 15000 WATT TRANSIENT SUPPRESSORS

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### VOLTAGES - 17 TO 220 VOLTS

### 15000 WATT MAXIMUM POWER DISSIPATION



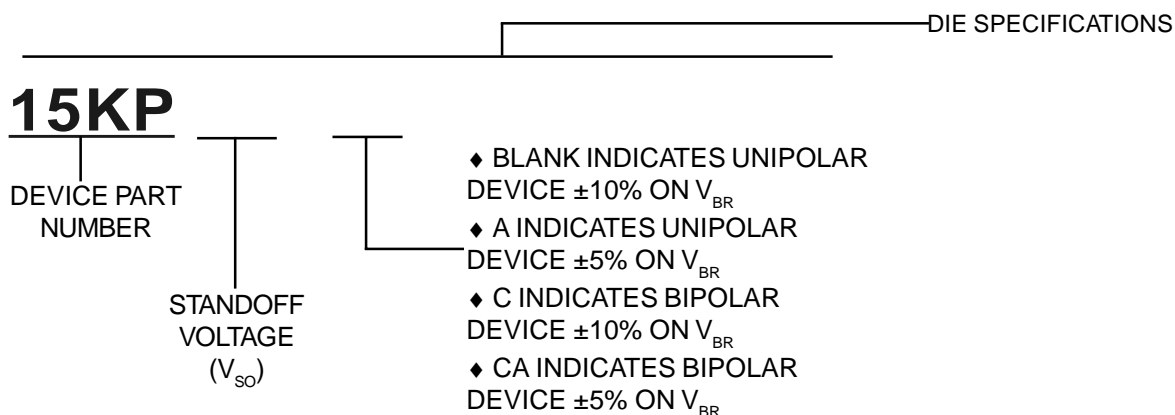
Two package sizes are available for your convenience. The "L" version is the industry standard size package for the 15KP. Our 15KPL version is to save space in your application. Both are UL approved.

### 15KP SERIES DEVICE SPECIFICATIONS

- ◆ Built With Sussex Glass Passivated Dies
- ◆ Available as Uni- and Bi-Directional
- ◆ Each Device Individually Inspected
- ◆ Molded Epoxy Package
- ◆ Operating Temperature: -55 to 175°C
- ◆ Storage Temperature: -55 to 175°C
- ◆ Available in Unipolar and Bipolar
- ◆ Marked With Sussex Logo, Part Number, and Cathode Band on Unipolar Types
- ◆ Solvent Resistant Marking
- ◆ Silver Plated Leads, Solderable Per MIL-STD-750



## CUSTOM ORDERING SPECIFIER





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**15KP SERIES 15000 WATT  
TRANSIENT SUPPRESSOR  
SPECIFICATIONS CONTINUED**

**TABLE 8A - 15KP SERIES TRANSIENT SUPPRESSOR ELECTRICAL SPECIFICATIONS (NOTE 1)**

SUSSEX PART NUMBERS	STANDOFF VOLTAGE (V <sub>SO</sub> ) Volts	MAX. REVERSE LEAKAGE (I <sub>R</sub> )@V <sub>SO</sub> (NOTE 2) µA	REVERSE BREAKDOWN VOLTAGE (V <sub>BR</sub> ) @ I <sub>T</sub>		TEST CURRENT (I <sub>T</sub> ) mA	MAX. CLAMPING VOLTAGE (V <sub>CL</sub> ) @ PEAK PULSE CURRENT (I <sub>PP</sub> ) (NOTE 3)		MAX. TEMP. COEFFICIENT OF V <sub>BR</sub> (%/°C)
			MIN. Volts	MAX. Volts		V <sub>CL</sub> Volts	I <sub>PP</sub> Amps	
15KP17	17	5000	18.9	23.10	50	32.3	464	0.090
15KP17A	17	5000	18.9	20.90	90	29.3	512	0.085
15KP18	18	5000	20	24.40	50	34.2	429	0.090
15KP18A	18	5000	20	22.10	50	309	485	0.086
15KP20	20	1500	22.2	27.10	20	37.9	396	0.097
15KP20A	20	1500	22.2	24.50	20	34.3	437	0.090
15KP22	22	500	24.4	29.80	10	41.1	365	0.100
15KP22A	22	500	24.4	26.90	10	37.1	404	0.094
15KP24	24	150	26.7	32.60	5	45	333	0.101
15KP24A	24	150	26.7	29.50	5	40.7	369	0.096
15KP26	26	50	28.9	35.30	5	48.7	308	0.100
15KP26A	26	50	28.9	31.90	5	44	341	0.095
15KP28	28	25	31.1	38.00	5	52.4	286	0.101
15KP28A	28	25	31.1	34.40	5	47.5	316	0.095
15KP30	30	15	33.3	40.70	5	56.2	267	0.073
15KP30A	30	15	33.3	36.80	5	50.7	296	0.097
15KP33	33	10	36.7	44.90	5	606	248	0.103
15KP33A	33	10	36.7	40.60	5	54.8	274	0.098
15KP36	36	10	40	48.90	5	66	227	0.103
15KP36A	36	10	40	44.20	5	59.7	251	0.097
15KP40	40	10	44.4	54.30	5	72.8	206	0.103
15KP40A	40	10	44.4	49.10	5	65.8	228	0.098
15KP43	43	10	47.8	58.40	5	77.1	195	0.104
15KP43A	43	10	47.8	52.80	5	69.7	215	0.099
15KP45	45	10	50	61.10	5	60.7	186	0.103
15KP45A	45	10	50	55.30	5	73	205	0.099
15KP48	48	10	53.3	65.20	5	85.9	175	0.105
15KP48A	48	10	53.3	58.90	5	77.7	193	0.100
15KP51	51	10	56.7	69.30	5	91.5	164	0.105
15KP51A	51	10	56.7	62.70	5	92.8	181	0.101
15KP54	54	10	60	73.30	5	968	155	0.105
15KP54A	54	10	60	66.30	5	87.5	171	0.100
15KP58	58	10	64.4	78.70	5	104	144	0.106
15KP58A	58	10	64.4	71.20	5	940	160	0.100
15KP60	60	10	66.7	81.50	5	107	140	0.105
15KP60A	60	10	66.7	73.70	5	97.3	154	0.101
15KP64	64	10	71.1	86.90	5	115	130	0.106

THIS TABLE CONTINUES

## NOTES

**NOTE 1:** ♦ ELECTRICAL CHARACTERISTICS ARE AT A JUNCTION TEMPERATURE (T<sub>J</sub>) OF 25°C  
**NOTE 2:** ♦ FOR BIPOLAR DEVICES WITH A V<sub>BR</sub> OF 10 VOLTS OR LESS, THE I<sub>R</sub> LIMIT IS DOUBLED

**NOTE 3:** ♦ SURGE CURRENT WAVEFORM SHOWN IN FIGURE 2A ON PAGE  
 ♦ PEAK PULSE POWER DERATING SHOWN IN FIGURE 3A ON PAGE



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SPECIFICATIONS CONTINUED**

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**TABLE 8A - 15KP SERIES TRANSIENT SUPPRESSOR ELECTRICAL SPECIFICATIONS (NOTE 1)**

SUSSEX PART NUMBERS	STANDOFF VOLTAGE (V <sub>SO</sub> ) Volts	MAX. REVERSE LEAKAGE (I <sub>R</sub> )@V <sub>SO</sub> (NOTE 2) µA	REVERSE BREAKDOWN VOLTAGE (V <sub>BR</sub> ) @ I <sub>T</sub>		TEST CURRENT (I <sub>T</sub> ) mA	MAX. CLAMPING VOLTAGE (V <sub>CL</sub> ) @ PEAK PULSE CURRENT (I <sub>PP</sub> ) (NOTE 3)		MAX. TEMP. COEFFICIENT OF V <sub>BR</sub> (%/°C)
			MIN. Volts	MAX. Volts		V <sub>CL</sub> Volts	I <sub>PP</sub> Amps	
			15KP64A	64		10	71.1	
15KP70	70	10	77.8	95.10	5	126	119	0.106
15KP70A	70	10	77.8	86.00	5	114	132	0.101
15KP75	75	10	83.3	102.00	5	135	111	0.108
16KP75A	75	10	83.3	92.10	5	122	123	0.101
15KP78	78	10	86.7	106.00	5	140	107	0.108
15KP78A	78	10	86.7	95.80	5	126	119	0.102
15KP85	85	10	94.4	115.00	5	152	99	0.108
15KP85A	85	10	94.4	104.00	5	137	109	0.103
15KP90	90	10	100	122.00	5	160	94	0.108
15KP90A	90	10	100	111.00	5	146	103	0.103
15KP100	100	10	111	136.00	5	179	84	0.109
15KP100A	100	10	111	123.00	5	162	93	0.103
15KP110	110	10	122	149.00	5	196	77	0.108
15KP110A	110	10	122	135.00	5	178	84	0.104
15KP120	120	10	133	163.00	5	214	70	0.109
15KP120A	120	10	133	147.00	5	193	78	0.104
15KP130	130	10	144	176.00	5	231	65	0.109
15KP130A	130	10	144	159.00	5	209	72	0.104
15KP150	150	10	167	204.00	5	268	56	0.109
15KP150A	150	10	167	185.00	5	243	62	0.104
15KP160	160	10	178	218.00	5	287	52	0.109
15KP160A	160	10	178	197.00	5	259	56	0.124
15KP170	170	10	189	231.00	5	304	49	0.109
15KP170A	170	10	189	209.00	5	275	55	0.104
15KP180	180	10	200	244.00	5	321	47	0.109
15KP180A	180	10	200	222.00	5	291	52	0.104
15KP200	200	10	222	272.00	5	356	42	0.109
15KP200A	200	10	222	247.00	5	322	47	0.104
15KP220	220	10	245	299.00	5	393	36	0.109
15KP220A	220	10	245	271.00	5	356	42	0.104

**NOTES**

**NOTE 1:** ♦ ELECTRICAL CHARACTERISTICS ARE AT A JUNCTION TEMPERATURE (T<sub>J</sub>) OF 25°C  
**NOTE 2:** ♦ FOR BIPOLAR DEVICES WITH A V<sub>BR</sub> OF 10 VOLTS OR LESS, THE I<sub>R</sub> LIMIT IS DOUBLED

**NOTE 3:** ♦ SURGE CURRENT WAVEFORM SHOWN IN FIGURE 2A ON PAGE  
 ♦ PEAK PULSE POWER DERATING SHOWN IN FIGURE 3A ON PAGE



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