



Micro Commercial Components  
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# 3KP5.0(C)(A) THRU 3KP170(C)(A)

## Features

- 3000 Watts Peak Power
- Low Inductance
- Unidirectional and Bidirectional unit
- Voltage Range: 5.0 to 170 Volts.

## 3000Watts Transient Voltage Suppressor 5.0 to 170 Volts

## Mechanical Data

- Case: Molded Plastic
- Polarity: Color band denotes cathode.
- Terminals: Axial leads, solderable per MIL-STD-202, Methode 208

## Maximum Ratings

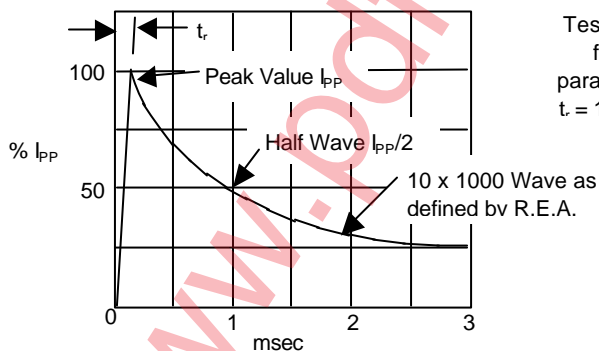
- Operating Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C
- 3000 watts of Peak Power Dissipation (10X1000 us)
- Forward Surge Current: 200 Amps, 1/120 sec @ 25°C
- $T_{clamping}$  (0 volts to  $V_{(BR)}$  min): less than  $1 \times 10^{-12}$  seconds

3KP

Cathode Mark

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.365	.375	9.27	9.53	
B	.240	.250	6.10	6.35	
C	.049	.050	1.25	1.27	
D	1.100	---	27.94	---	

Figure 1 - Pulse Waveform



Peak Pulse Current (%  $I_{PP}$ ) - Versus - Time (t)

# 3KP Series



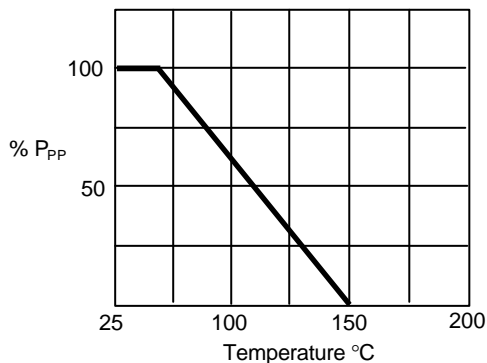
MCC PART NUMBER	REVERSE STAND-OFF VOLTAGE $V_{WM}$	BREAKDOWN VOLTAGE $V_{(BR)} @ I_T$ (VOLTS)			MAXIMUM CLAMPING VOLTAGE @ $I_{PP}$	PEAK PULSE CURRENT $I_{PP}$	MAXIMUM REVERSE LEAKAGE @ $V_{WM}$ $I_b$
	(VOLTS)	MIN	MAX	$I_T$ (mA)	(VOLTS)	(AMPS)	( $\mu$ A)
3KP5.0	5.0	6.40	7.30	10	9.6	312.5	1000
3KP5.0A	5.0	6.40	7.00	10	9.2	326.0	1000
3KP6.0	6.0	6.67	8.15	10	11.4	263.2	1000
3KP6.0A	6.0	6.67	7.37	10	10.3	291.3	1000
3KP6.5	6.5	7.22	8.82	10	12.3	243.9	500
3KP6.5A	6.5	7.22	7.98	10	11.2	267.9	500
3KP7.0	7.0	7.78	9.51	10	13.3	225.6	200
3KP7.0A	7.0	7.78	8.60	10	12.0	250.0	200
3KP7.5	7.5	8.33	10.2	1	14.3	209.8	100
3KP7.5A	7.5	8.33	9.21	1	12.9	232.6	100
3KP8.0	8.0	8.89	10.9	1	15.0	200.0	50
3KP8.0A	8.0	8.89	9.83	1	13.6	220.6	50
3KP8.5	8.5	9.44	11.5	1	15.9	188.6	25
3KP8.5A	8.5	9.44	10.4	1	14.4	208.4	25
3KP9.0	9.0	10.0	12.2	1	16.9	177.4	10
3KP9.0A	9.0	10.0	11.1	1	15.4	194.8	10
3KP10	10	11.1	13.6	1	18.8	159.6	5
3KP10A	10	11.1	12.3	1	17.0	176.4	5
3KP11	11	12.2	14.9	1	20.1	149.2	5
3KP11A	11	12.2	13.5	1	18.2	164.8	5
3KP12	12	13.3	16.3	1	22.0	136.4	5
3KP12A	12	13.3	14.7	1	19.9	150.6	5
3KP13	13	14.4	17.6	1	23.8	126.0	5
3KP13A	13	14.4	15.9	1	21.5	139.4	5
3KP14	14	15.6	19.1	1	25.8	116.2	5
3KP14A	14	15.6	17.2	1	23.2	129.4	5
3KP15	15	16.7	20.4	1	26.9	111.6	5
3KP15A	15	16.7	18.5	1	24.4	123.0	5
3KP16	16	17.8	21.8	1	28.8	104.2	5
3KP16A	16	17.8	19.7	1	26.0	115.4	5
3KP17	17	18.9	23.1	1	30.5	98.4	5
3KP17A	17	18.9	20.9	1	27.6	106.6	5
3KP18	18	20.0	24.4	1	32.2	93.2	5
3KP18A	18	20.0	22.1	1	29.2	102.8	5
3KP20	20	22.2	27.1	1	35.8	83.8	5
3KP20A	20	22.2	24.5	1	32.4	92.6	5
3KP22	22	24.4	29.8	1	39.4	76.2	5
3KP22A	22	24.4	26.9	1	35.5	84.4	5
3KP24	24	26.7	32.6	1	43.0	69.8	5
3KP24A	24	26.7	29.5	1	38.9	77.2	5
3KP26	26	28.9	35.3	1	46.6	64.4	5
3KP26A	26	28.9	31.9	1	42.1	71.2	5
3KP28	28	31.1	38.0	1	50.0	60.0	5
3KP28A	28	31.1	34.4	1	45.4	66.0	5
3KP30	30	33.3	40.7	1	53.5	56.0	5
3KP30A	30	33.3	36.8	1	48.4	62.0	5
3KP33	33	36.7	44.9	1	59.0	50.4	5
3KP33A	33	36.7	40.6	1	53.3	56.2	5
3KP36	36	40.0	48.9	1	64.3	46.6	5
3KP36A	36	40.0	44.2	1	58.1	51.6	5
3KP40	40	44.4	54.3	1	71.4	42.0	5
3KP40A	40	44.4	49.1	1	64.5	46.4	5
3KP43	43	47.8	58.4	1	76.7	39.2	5
3KP43A	43	47.8	52.8	1	69.4	43.2	5
3KP45	45	50.0	61.1	1	80.3	37.4	5
3KP45A	45	50.0	55.3	1	72.7	41.2	5
3KP48	48	53.3	65.1	1	85.5	35.0	5

# 3KP Series



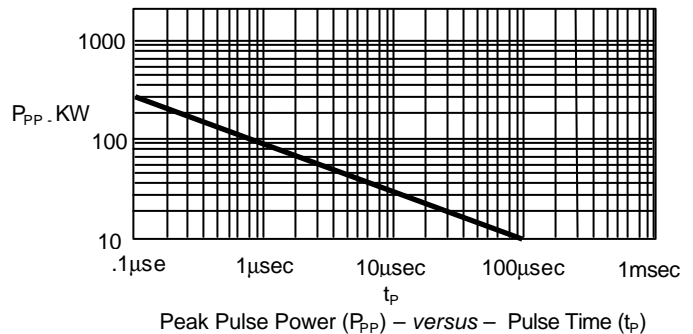
MCC PART NUMBER	REVERSE STAND-OFF VOLTAGE $V_{WM}$ (VOLTS)	BREAKDOWN VOLTAGE $V_{(BR)}$ @ $I_T$ (VOLTS)			MAXIMUM CLAMPING VOLTAGE @ $I_{PP}$ (VOLTS)	PEAK PULSE CURRENT $I_{PP}$ (AMPS)	MAXIMUM REVERSE LEAKAGE @ $V_{WM}$ $I_b$ ( $\mu$ A)
		MIN	MAX	$I_T$ (mA)			
3KP48A	48	53.3	58.9	1	77.4	38.8	5
3KP51	51	56.7	69.3	1	91.1	37.0	5
3KP51A	51	56.7	62.7	1	82.4	36.4	5
3KP54	54	60.0	73.3	1	96.3	31.2	5
3KP54A	54	60.0	66.3	1	87.1	34.4	5
3KP58	58	64.4	78.7	1	103	39.2	5
3KP58A	58	64.4	71.2	1	93.6	32.0	5
3KP60	60	66.7	81.5	1	107	28.0	5
3KP60A	60	66.7	73.7	1	96.8	31.0	5
3KP64	64	71.1	86.9	1	114	26.4	5
3KP64A	64	71.1	78.6	1	103	29.2	5
3KP70	70	77.8	95.1	1	125	24.0	5
3KP70A	70	77.8	86.0	1	113	26.6	5
3KP75	75	83.3	102	1	134	22.4	5
3KP75A	75	83.3	92.1	1	121	24.8	5
3KP78	78	86.7	106	1	139	21.6	5
3KP78A	78	86.7	95.8	1	126	22.8	5
3KP85	85	94.4	115	1	151	19.8	5
3KP85A	85	94.4	104	1	137	20.8	5
3KP90	90	100	122	1	160	18.8	5
3KP90A	90	100	111	1	146	20.6	5
3KP100	100	111	136	1	179	16.8	5
3KP100A	100	111	123	1	162	18.6	5
3KP110	110	122	149	1	196	15.4	5
3KP110A	110	122	135	1	177	16.8	5
3KP120	120	133	163	1	214	14.0	5
3KP120A	120	133	147	1	193	15.6	5
3KP130	130	144	176	1	231	13.0	5
3KP130A	130	144	159	1	209	14.4	5
3KP150	150	167	204	1	268	11.2	5
3KP150A	150	167	185	1	243	12.4	5
3KP160	160	178	218	1	287	10.4	5
3KP160A	160	178	197	1	259	11.6	5
3KP170	170	189	231	1	304	9.8	5
3KP170A	170	189	209	1	275	11.0	5

Figure 2 - Derating Curve



Peak Pulse Power (% P<sub>pp</sub>) - Versus - Temperature °C

Figure 3



Peak Pulse Power (P<sub>pp</sub>) - versus - Pulse Time (t<sub>p</sub>)

## 3KP Series



### **ORDER INFORMATION:**

P/N: 3KPXXX-\*

\* ----- B (Bulk Packaging)

\* ----- T (Tape and Reel Packaging)

For Example:

3KP28A-T means MCC P/N is 3KP28A, tape and reel package.