

# Metal Oxide Varistor Current Protected type 14mm

CPV14-2K Series

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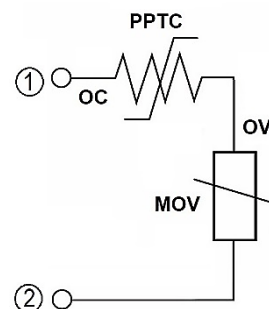
## FEATURE

- Integrated PPTC and MOV Technology in a Single Protection Device
- Single Device for Overcurrent and Overvoltage Protection
- Resettable Circuit Protection Device for Cost-sensitive Equipment
- Application: Relay and Electromagnetic Valve Protection, VoIP Gateway, Analogy and ISDN Line cards, Security System, Set-top Box
- Compliance to UL1449
- UL/cUL Safety Approved: Certification No: E326004



## MECHANICAL DATA

- Lead Material: Copper Clad Steel Wire, AWG20
- UL Flammability Classification 94V-0
- Solderable Characteristics: Per MIL-STD-202, method 208E



## ELECTRICAL CHARACTERISTICS

Part Number	Varistor DC Voltage (at 1mA)	Max Continuous Voltage		Max Clamping Voltage (8/20μs)		Max Peak Current (8/20μs)		Max Energy (2ms)	Abnormal Overvoltage Surge Protection			Typical Capacitance @1kHz
	V <sub>N</sub> (V <sub>DC</sub> )	V <sub>AC</sub>	V <sub>DC</sub>	V <sub>C</sub>	I <sub>P</sub>	1x Pulse	15x Pulse	(J)	V <sub>max</sub>	I <sub>max</sub>	Typical Reaction Time	(pF)
	(V)	(V <sub>rms</sub> )	(V)	(V)	(A)	(A)	(A)		(V)	(A)	(sec)	
CPV14201K2K*	200(185~225)	130	170	450	50	2000	1000	14	380	50	10	1000
CPV14221K2K*	220(198~242)	140	180	470	50	2000	1000	16	380	50	10	900
CPV14241K2K*	240(216~264)	150	200	490	50	2000	1000	17	380	50	10	800
CPV14271K2K*	270(243~297)	175	225	520	50	2000	1000	19	380	50	10	700
CPV14301K2K*	300(270~330)	195	250	530	50	2000	1000	21	380	50	10	600
CPV14331K2K*	330(297~363)	215	275	570	50	2000	1000	23	380	50	10	580
CPV14361K2K*	360(324~396)	230	300	600	50	2000	1000	25	400	50	10	550
CPV14391K2K*	390(351~429)	250	320	650	50	2000	1000	28	480	50	10	500
CPV14431K2K*	430(387~473)	275	350	710	50	2000	1000	32	480	50	10	450
CPV14471K2K*	470(423~517)	300	385	775	50	2000	1000	34	480	50	10	400
CPV14511K2K*	510(459~561)	320	420	840	50	2000	1000	36	480	50	10	380
CPV14561K2K*	560(504~616)	350	460	915	50	2000	1000	39	600	50	10	380
CPV14621K2K*	620(558~682)	395	510	1020	50	2000	1000	43	600	50	10	350
CPV14681K2K*	680(612~748)	420	560	1120	50	2000	1000	46	690	50	10	350
CPV14751K2K*	750(675~825)	465	615	1235	50	2000	1000	50	690	50	10	330
CPV14781K2K*	780(702~858)	485	640	1290	50	2000	1000	52	690	50	10	330

Note: Operating / Storage Temperature: -40°C ~ 85°C. \*: Internal control code

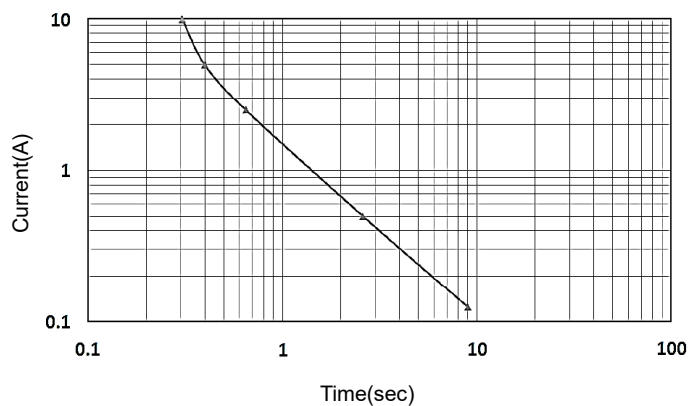
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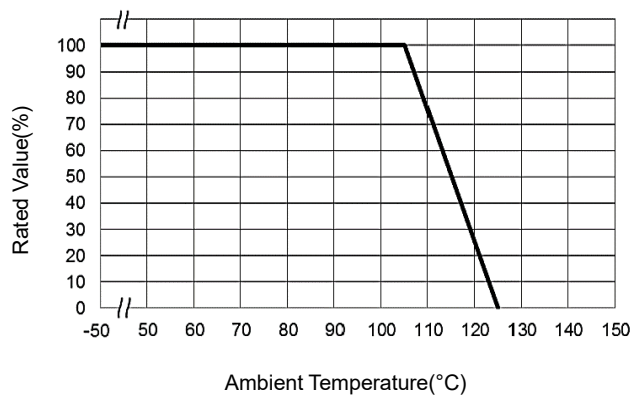
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## CHARACTERISTIC CURVES

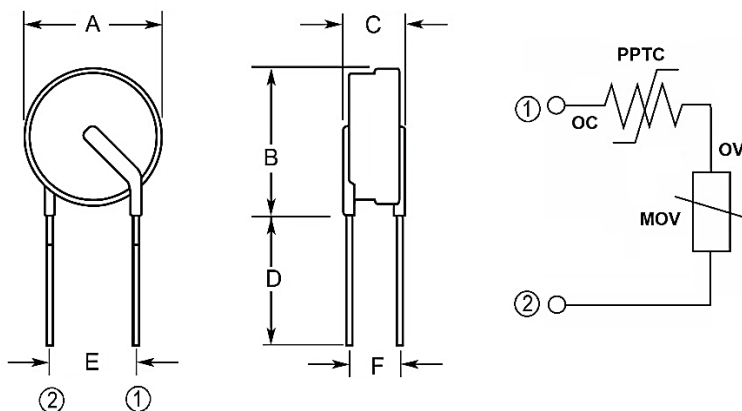
Current (Thermal) Characteristics – CPV14 Series



Power Derating



## DIMENSIONS



Part Number	A		B		C	D	E		F	
	Min	Max	Min	Max	Max	Min	Min	Max	Min	Max
CPV14201K2K*	13.5	17.0	17.0	22.0	9.0	25.4	6.5	8.5	2.0	5.0
CPV14221K2K*	13.5	17.0	17.0	22.0	9.0	25.4	6.5	8.5	2.0	5.0
CPV14241K2K*	13.5	17.0	17.0	22.0	9.0	25.4	6.5	8.5	2.0	5.0
CPV14271K2K*	13.5	17.0	17.0	22.0	9.0	25.4	6.5	8.5	2.0	5.0
CPV14301K2K*	13.5	17.0	17.0	22.0	9.5	25.4	6.5	8.5	2.5	5.5
CPV14331K2K*	13.5	17.0	17.0	22.0	9.5	25.4	6.5	8.5	2.5	5.5
CPV14361K2K*	13.5	17.0	17.0	22.0	9.5	25.4	6.5	8.5	2.5	5.5
CPV14391K2K*	13.5	17.0	17.0	22.0	9.5	25.4	6.5	8.5	2.5	5.5
CPV14431K2K*	13.5	17.0	17.0	22.0	9.5	25.4	6.5	8.5	2.5	5.5
CPV14471K2K*	13.5	17.0	17.0	22.0	11.0	25.4	6.5	8.5	4.0	7.0
CPV14511K2K*	13.5	17.0	17.0	22.0	11.0	25.4	6.5	8.5	4.0	7.0
CPV14561K2K*	13.5	17.0	17.0	22.0	11.0	25.4	6.5	8.5	4.0	7.0
CPV14621K2K*	13.5	17.0	17.0	22.0	11.0	25.4	6.5	8.5	4.0	7.0
CPV14681K2K*	13.5	17.0	17.0	22.0	11.0	25.4	6.5	8.5	4.5	7.5
CPV14751K2K*	13.5	17.0	17.0	22.0	11.0	25.4	6.5	8.5	5.0	8.0
CPV14781K2K*	13.5	17.0	17.0	22.0	11.0	25.4	6.5	8.5	5.0	8.0

All Dimensions in mm

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## PART NUMBERING SYSTEM

CPV    14    201K    2K    xx  
(1)        (2)        (3)        (4)        (5)

No	Item	Code	Description
(1)	Product Code	CPV	Current Protected Metal Oxide Varistor series
(2)	Diameter	14	14: 14mm
(3)	Varistor Voltage	201K	200VDC $\pm 10\%$ First two digits: significant, Third: multiplier
(4)	Max Peak Current	2K	2K: 2000A, Max Peak Current, 8/20 $\mu$ s 1xPulse
(5)	Internal Code	xx	Internal Control or Project Reference

\*Specifications subject to change without notice.