

Metal Oxide Varistors (MOV) Data sheet

Features

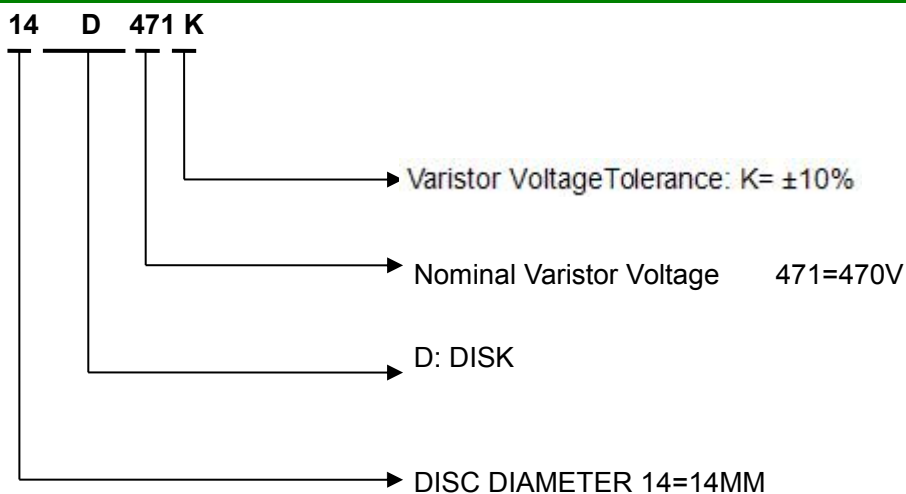
- Wide operating voltage (V1mA) range from 18V to 1800V
- Fast responding to transient over-voltage
- Large absorbing transient energy capability
- Low clamping ratio and no follow-on current
- Meets MSL level 1, per J-STD-020
- Safety certification: UL1414, UL1449, CSA, VDE
- Operating Temperature: -40°C ~ +85°C
- Storage Temperature: -40°C ~ +125°C

Applications

- Transistor, diode, IC, thyristor or triac semiconductor protection
- Surge protection in consumer electronics
- Surge protection in industrial electronics
- Surge protection in electronic home appliances, gas and petroleum appliances
- Relay and electromagnetic valve surge absorption



Description of Part Number



14D Series

Electrical Characteristics

Part Number	Maximum Allowable Voltage		Varistor Voltage	Maximum Clamping Voltage		Withstanding Surge Current	Maximum Energy (10/1000µs)	Rated Power	Typical Capacitance (Reference)
	V _{AC} (V)	V _{DC} (V)		I _p (A)	V _c (V)				
Standard	V _{AC} (V)	V _{DC} (V)	V _{1mA} (V)	I _p (A)	V _c (V)	I(A) Standard	(J) Standard	(W)	1KHz(pf)
14D180K	11	14	18(15~21.6)	10	36	1000	4	0.1	11100
14D220K	14	18	22(19.5~26)	10	43	1000	5	0.1	9100
14D270K	17	22	27(24~30)	10	53	1000	6	0.1	7400
14K330K	20	26	33(29.5~36.5)	10	66	1000	7.5	0.1	6100
14D390K	25	31	39(35~43)	10	77	1000	8.6	0.1	5100
14D470K	30	38	47(42~54)	10	93	1000	10	0.1	4300
14D560K	35	45	56(50~62)	10	100	1000	11	0.1	3600
14D680K	40	56	68(61~75)	10	135	1000	14	0.1	2900
14D820K	50	65	82(74~90)	50	135	4500	22	0.6	2400
14D101K	60	85	100(90~110)	50	165	4500	28	0.6	2000
14D121K	75	100	120(108~132)	50	200	4500	32	0.6	1700
14D151K	95	125	150(135~165)	50	250	4500	40	0.6	1300
14D181K	115	150	180(162~198)	50	300	4500	50	0.6	1100
14D201K	130	170	200(180~220)	50	340	4500	57	0.6	1000
14D221K	140	180	220(198~242)	50	360	4500	60	0.6	900
14D241K	150	200	240(216~264)	50	395	4500	63	0.6	830
14D271K	175	225	270(243~297)	50	455	4500	70	0.6	740
14D301K	190	250	300(270~330)	50	500	4500	77	0.6	670
14D331K	210	275	330(297~363)	50	550	4500	85	0.6	610
14D361K	230	300	360(324~396)	50	595	4500	93	0.6	560
14D391K	250	320	390(351~429)	50	650	4500	100	0.6	510
14D431K	275	350	430(387~473)	50	710	4500	115	0.6	460
14D471K	300	385	470(423~517)	50	775	4500	125	0.6	430
14D511K	320	415	510(459~561)	50	845	4500	125	0.6	390
14D561K	350	460	560(504~616)	50	925	4500	125	0.6	360
14D621K	385	505	620(558~682)	50	1025	4500	125	0.6	320
14D681K	420	560	680(612~748)	50	1120	4500	130	0.6	290
14D751K	460	615	750(675~825)	50	1240	4500	143	0.6	270
14D781K	485	640	780(702~858)	50	1290	4500	148	0.6	260
14D821K	510	670	820(738~902)	50	1355	4500	157	0.6	240
14D911K	550	745	910(819~1001)	50	1500	4500	175	0.6	220
14D102K	625	825	1000(900~1100)	50	1650	4500	190	0.6	200

14D Series

14D112K	680	895	1100(990~1210)	50	1815	4500	213	0.6	180
14D122K	750	990	1200(1080~1320)	50	1980	4500	213	0.6	150
14D182K	1000	1465	1800(1620~1980)	50	2970	4500	250	0.6	130

Dimension(mm)

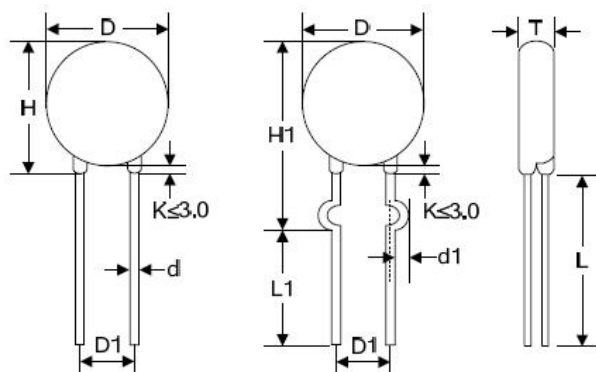


TABLE 1

Symbol	Dimensions
H(max.)	20.0
H1(max.)	21.0
L(min.)	20.0
L1(min.)	15.0
D(max.)	16.5
D1(±0.8)	7.5
T(max.)	TABLE 2
d(±0.05)	0.8
d1(±0.4)	1.4

TABLE 2

Model	T(max.)	Model	T(max.)
180K	3.94	301K	4.64
220K	4.02	331K	5.02
270K	4.16	361K	5.20
330K	4.38	391K	5.38
390K	4.14	431K	5.63
470K	4.33	471K	5.87
560K	4.58	511K	6.12
680K	4.87	561K	6.42
820K	4.08	621K	6.79
101K	4.25	681K	7.16
121K	4.40	751K	7.23
151K	4.12	781K	7.29
181K	4.26	821K	7.51
201K	4.36	911K	7.55
221K	4.40	102K	8.00
241K	4.55	112K	8.50
271K	4.60	182K	12.0

Packing Information

Part Number	Quantity	Packaging Option	Packaging Specification
14DxxxK	500	Plastic bag	Bulk Pack