



#### Features

- Wide operating voltage (V1mA) range from 18V to 1100V
- 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

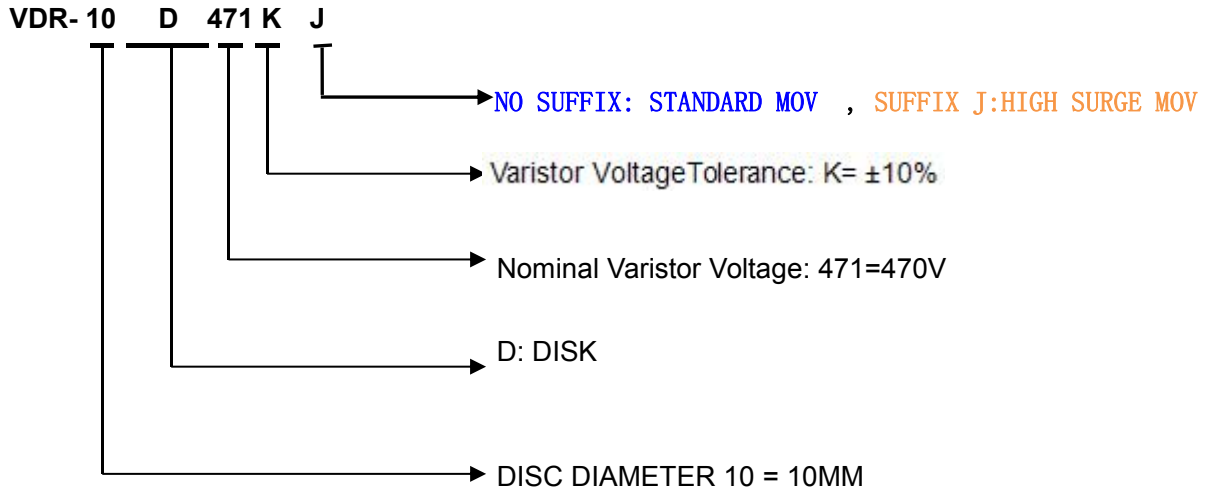


VDR-10D471K Picture

#### 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

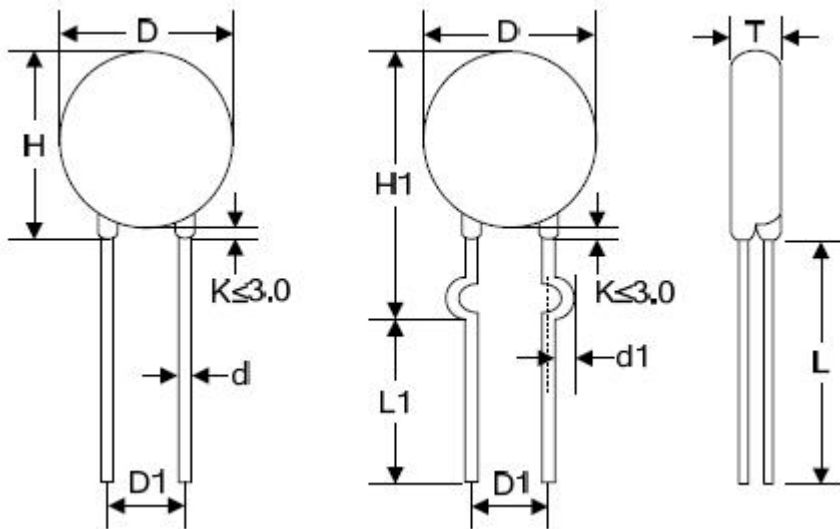


### Electrical Characteristics



Part Number		Maximum Allowable Voltage		Varistor Voltage	Maximum Clamping Voltage	Withstanding Surge Current 8/20uS		Maximum Energy (10/1000µs)		Typical Capacitance (Reference)
Standard	High Surge	V <sub>AC</sub> (V)	V <sub>DC</sub> (V)	V <sub>1mA</sub> (V)	V <sub>c</sub> (V)	I(A)	I(A)	(J)	(J)	1KHz(pf)
					AT 25A	Standard	High Surge	Standard	High Surge	
VDR-10D180K	VDR-10D180KJ	11	14	18(15~21.6)	36	500	1000	2.1	3.0	5600
VDR-10D220K	VDR-10D220KJ	14	18	22(19.5~26)	43	500	1000	2.5	5.0	4500
VDR-10D270K	VDR-10D270KJ	17	22	27(24~30)	53	500	1000	3	6.0	3700
VDR-10D330K	VDR-10D330KJ	20	26	33(29.5~36.5)	66	500	1000	4	7.0	3000
VDR-10D390K	VDR-10D390KJ	25	31	39(35~43)	77	500	1000	4.6	9.0	2400
VDR-10D470K	VDR-10D470KJ	30	38	47(42~54)	93	500	1000	5.5	11.0	2100
VDR-10D560K	VDR-10D560KJ	35	45	56(50~62)	100	500	1000	7	13.0	1800
VDR-10D680K	VDR-10D680KJ	40	56	68(61~75)	135	500	1000	8.2	15.0	1500
VDR-10D820K	VDR-10D820KJ	50	65	82(74~90)	135	2500	3500	12	17.0	1200
VDR-10D101K	VDR-10D101KJ	60	85	100(90~110)	165	2500	3500	15	18.0	1000
VDR-10D121K	VDR-10D121KJ	75	100	120(108~132)	200	2500	3500	18	21.0	830
VDR-10D151K	VDR-10D151KJ	95	125	150(135~165)	250	2500	3500	22	25.0	670
VDR-10D181K	VDR-10D181KJ	115	150	180(162~198)	300	2500	3500	27	30.0	560
VDR-10D201K	VDR-10D201KJ	130	170	200(180~220)	340	2500	3500	30	35.0	500
VDR-10D221K	VDR-10D221KJ	140	180	220(198~242)	360	2500	3500	32	39.0	450
VDR-10D241K	VDR-10D241KJ	150	200	240(216~264)	395	2500	3500	35	42.0	420
VDR-10D271K	VDR-10D271KJ	175	225	270(243~297)	455	2500	3500	40	49.0	370
VDR-10D301K	VDR-10D301KJ	190	250	300(270~330)	500	2500	3500	40	54.0	330
VDR-10D331K	VDR-10D331KJ	210	275	330(297~363)	550	2500	3500	40	58.0	300
VDR-10D361K	VDR-10D361KJ	230	300	360(324~396)	595	2500	3500	43	65.0	280
VDR-10D391K	VDR-10D391KJ	250	320	390(351~429)	650	2500	3500	47	70.0	260
VDR-10D431K	VDR-10D431KJ	275	350	430(387~473)	710	2500	3500	60	80.0	230
VDR-10D471K	VDR-10D471KJ	300	385	470(423~517)	775	2500	3500	65	85.0	210
VDR-10D511K	VDR-10D511KJ	320	415	510(459~561)	845	2500	3500	70	90.0	200
VDR-10D561K	VDR-10D561KJ	350	460	560(504~616)	925	2500	3500	70	92.0	180
VDR-10D621K	VDR-10D621KJ	385	505	620(558~682)	1025	2500	3500	70	95.0	160
VDR-10D681K	VDR-10D681KJ	420	560	680(612~748)	1120	2500	3500	70	98.0	150
VDR-10D751K	VDR-10D751KJ	460	615	750(675~825)	1240	2500	3500	70	100.0	130
VDR-10D781K	VDR-10D781KJ	485	640	780(702~858)	1290	2500	3500	80	105.0	130
VDR-10D821K	VDR-10D821KJ	510	670	820(738~902)	1355	2500	3500	85	110.0	120
VDR-10D911K	VDR-10D911KJ	550	745	910(819~1001)	1500	2500	3500	93	130.0	110
VDR-10D102K	VDR-10D102KJ	625	825	1000(900~1100)	1650	2500	3500	102	140.0	100
VDR-10D112K	VDR-10D112KJ	680	895	1100(990~1210)	1815	2500	3500	115	155.0	90

### Dimension(mm)



**TABLE 1**

Symbol	Dimensions
H(max.)	16.5
H1(max.)	17.5
L(min.)	20.0
L1(min.)	15.0
D(max.)	12.5
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	4.6	301K	5.5
220K	4.7	331K	5.8
270K	4.8	361K	6.0
330K	5.0	391K	6.2
390K	5.3	431K	6.5
470K	5.4	471K	6.7
560K	5.5	511K	6.8
680K	5.6	561K	7.0
820K	4.7	621K	7.3
101K	4.9	681K	7.6
121K	5.1	751K	8.0
151K	5.4	781K	8.1
181K	4.8	821K	8.3
201K	5.0	911K	8.8
221K	5.1	102K	9.3
241K	5.2	112K	9.9
271K	5.4	182K	10.0

### Packing Information

Part Number	Quantity	Packaging Option	Packaging Specification
VDR-10DxxxK	500PCS	Plastic bag	Bulk Pack

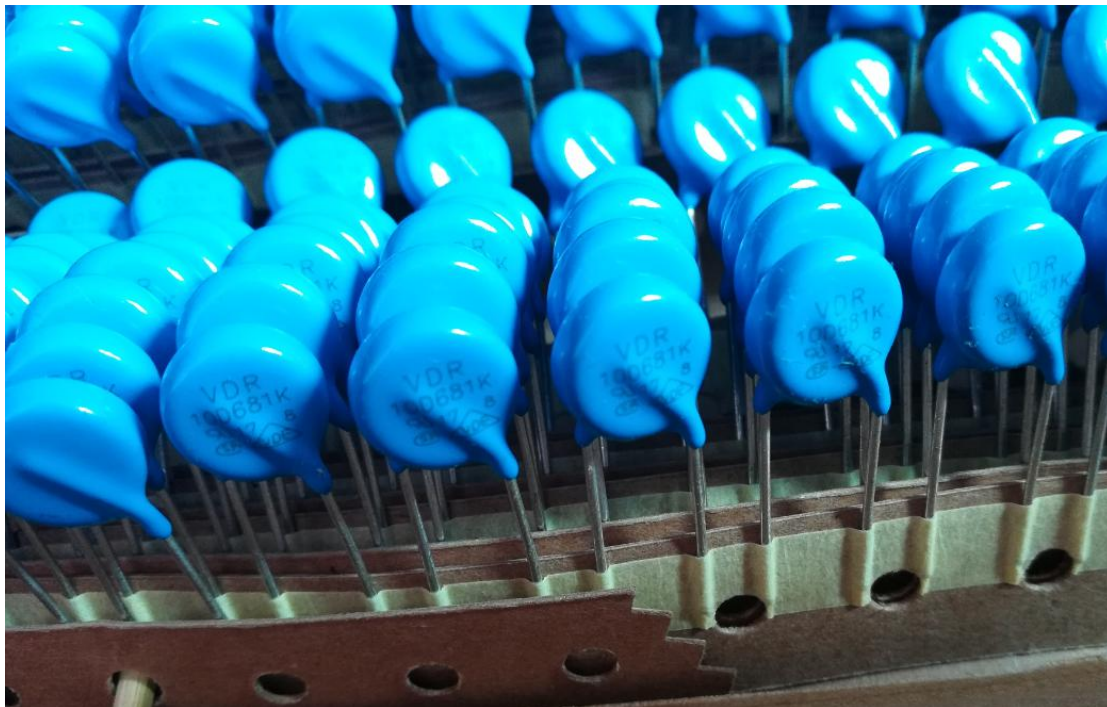
[sales@huaandz.com](mailto:sales@huaandz.com)



### Bulk Pack



### Ammo Pack



[sales@huaandz.com](mailto:sales@huaandz.com)