HUAAN 华兴安电子 HUAAN LIMITED

VDR-32D Straight Leads Series

Metal Oxide Varistors (MOV)

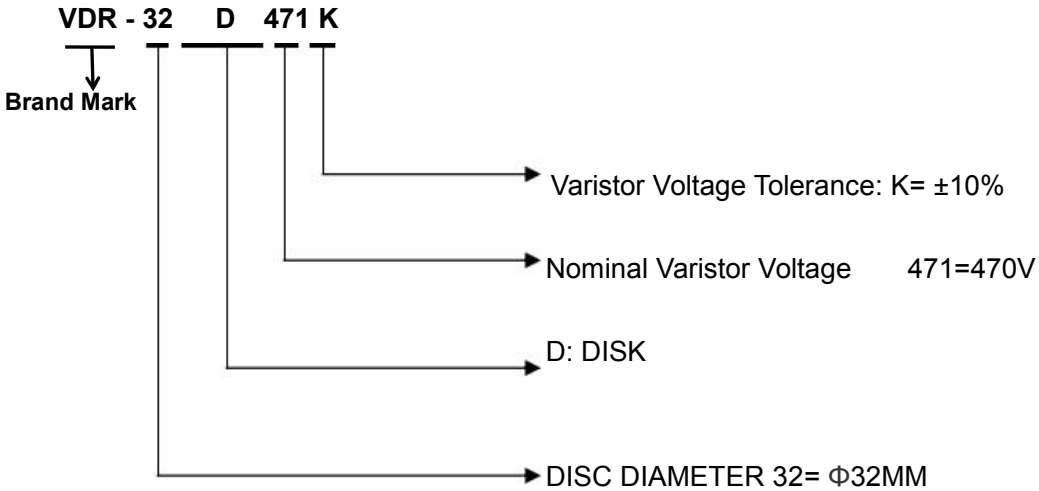
Features

·Wide operating voltage (V1mA) range from 33V to 1600V
·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
·Operating Temperature：-40℃ ~ +85℃
·Storage Temperature：-40℃ ~ +125℃
·UL 1449 4th for SPD Type 5 application
·Safety certification:

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



Delivery Time

Standard MOV	Delivery Time
VDR-32D201K~VDR-32D182K	24days

Electrical Characteristics

Part Number	Maximum Allowable Voltage		Varistor Voltage	Maximum Clamping Voltage		Max Surge Current 8/20μs	Maximum Energy (10/1000μs)	Capacitance(Reference)	Safety Certification	
Standard MOV	AC(V)	DC(V)	V_{1mA}(V)	I_P(A)	V_C(V)	Imax	(J)	@1KHz(PF)	UL	CUL
VDR-32D201K	130	170	200(180~220)	200	340	25KA	250	5200	√	√
VDR-32D221K	140	180	220(198~242)	200	360	25KA	270	5150	√	√
VDR-32D241K	150	200	240(216~264)	200	395	25KA	290	5100	√	√
VDR-32D271K	175	225	270(243~297)	200	455	25KA	300	4800	√	√
VDR-32D301K	190	250	300(270~330)	200	500	25KA	330	4550	√	√
VDR-32D331K	210	275	330(297~363)	200	550	25KA	360	4300	√	√
VDR-32D361K	230	300	360(324~396)	200	595	25KA	380	3900	√	√
VDR-32D391K	250	320	390(351~429)	200	650	25KA	400	3200	√	√
VDR-32D431K	275	350	430(387~473)	200	710	25KA	430	3100	√	√
VDR-32D471K	300	385	470(423~517)	200	775	25KA	460	2800	√	√
VDR-32D511K	320	415	510(459~561)	200	845	25KA	510	2700	√	√
VDR-32D561K	350	460	560(504~616)	200	925	25KA	540	2550	√	√
VDR-32D621K	385	505	620(558~682)	200	1025	25KA	570	2400	√	√
VDR-32D681K	420	560	680(612~748)	200	1120	25KA	600	2200	√	√
VDR-32D751K	460	615	750(675~825)	200	1240	25KA	620	2000	√	√
VDR-32D781K	485	640	780(702~858)	200	1290	25KA	660	1900	√	√
VDR-32D821K	510	670	820(738~902)	200	1355	25KA	700	1800	√	√
VDR-32D911K	550	745	910(819~1001)	200	1500	25KA	750	1300	√	√
VDR-32D102K	625	825	1000(900~1100)	200	1650	25KA	780	1100	√	√
VDR-32D112K	680	895	1100(990~1210)	200	1815	25KA	810	1000	√	√
VDR-32D122K	750	990	1200(1080~1320)	200	1980	25KA	910	920	√	√
VDR-32D142K	880	1140	1400(1260~1540)	200	2310	25KA	960	800	√	√
VDR-32D162K	1000	1280	1600(1440~1760)	200	2640	25KA	1020	700	√	√
VDR-32D182K	1100	1465	1800(1620~1980)	200	2970	25KA	1080	600	√	√

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Dimension(mm) Straight Leads

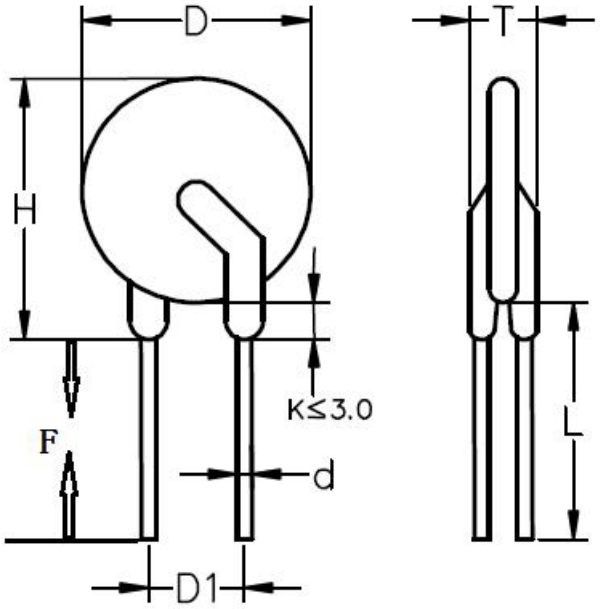

TABLE1		TABLE2			
Symbol	Dimensions	Part number	T(±1.0mm)	Part number	T(±1.0mm)
H(Max)	39.0mm	VDR-32D201K	4.7mm	VDR-32D621K	7.0mm
F(Min)	20.0mm	VDR-32D221K	4.8mm	VDR-32D681K	7.0mm
L(Min)	23.0mm	VDR-32D241K	4.9mm	VDR-32D751K	7.1mm
D(Max)	34.0mm	VDR-32D271K	5.1mm	VDR-32D781K	7.4mm
D1(±0.8)	20.0mm	VDR-32D301K	5.3mm	VDR-32D821K	7.8mm
T	TABLE2	VDR-32D331K	5.4mm	VDR-32D911K	8.2mm
d(±0.05)	1.2mm	VDR-32D361K	5.6mm	VDR-32D102K	8.4mm
		VDR-32D391K	5.7mm	VDR-32D112K	9.1mm
		VDR-32D431K	5.9mm	VDR-32D122K	11.6mm
		VDR-32D471K	6.2mm	VDR-32D142K	12.1mm
		VDR-32D511K	6.4mm	VDR-32D162K	12.6mm
		VDR-32D561K	6.8mm	VDR-32D182K	13.1mm

Packing Information

Part Number	Quantity	Packaging Option	Packaging Specification
VDR-32DxxxK	100PCS	Plastic bag	Bulk Pack

Notice for use

To avoid damage to other equipment due to fire or deterioration caused by varistor, please refer to and observe the following principles:

1) When a high current or high voltage flows into the varistor, the varistor itself may be damaged, heated, smoke, catch fire and burst.

To avoid this, fuses or circuit breakers can be installed at both ends of the varistor or power supply;

The fuses of the following specifications are for reference only:

Diameter	05D	07D	10D	14D	20D
Rated current of fuse	1-2A	2-3A	3-5A	3-10A	5-15A

2) Do not allow the current and energy flowing into the varistor to exceed its rated value.

3) The marked VDR product brand names and marks are all patent applications of the company. Customers who use or sell VDR products that are not specifically designated for such applications are at their own risk.

4) All VDR products, product specifications and data are subject to change without notice, please improve. For any data sheet Or any other data sheet. Any errors included. Inaccurate or incomplete shall not be liable.

5) Regarding the suitability of products for specific applications. It is the customer's responsibility to confirm that products with the characteristics described in the product specifications application. The data provided in the parameter data sheets and / or specifications may vary for different applications and performance may vary over time Variety. All operating parameters, including typical parameters, must be provided by the customer ’s technical experts. Product specifications will not expand or Modify the VDR procurement terms and conditions in other ways, including but not limited to the guarantees described therein.

6) Do not place flammable substances near the varistor.

7) The varistor can only emit a small amount of heat energy, so it is not suitable for use in equipment that often generates sudden heat.

In addition, the higher the working environment of the varistor, the smaller the proportion of heat dissipated. Varistors can only dissipate a small amount of heat energy, so they are not suitable for use in equipment that often generates sudden heat.

If a large amount of heat acts on the varistor in an instant, it is possible that the heat energy cannot be dissipated within the pulse time And the varistor is damaged.

8) When welding, please be careful not to melt the welding points of the varistor and the resin coating.

Material category policy

All products of VDR hereby certify that RoHS-compliant products are in accordance with the definitions and Restrictions on June 8, 2011 regarding restrictions on the use of certain hazardous substances (Reach) in electrical and electronic equipment. We confirm All VDR products comply with the IEC 61249-2-21 JEDEC JS709A standard.