

Metal Oxide Varistors (MOV)

Features

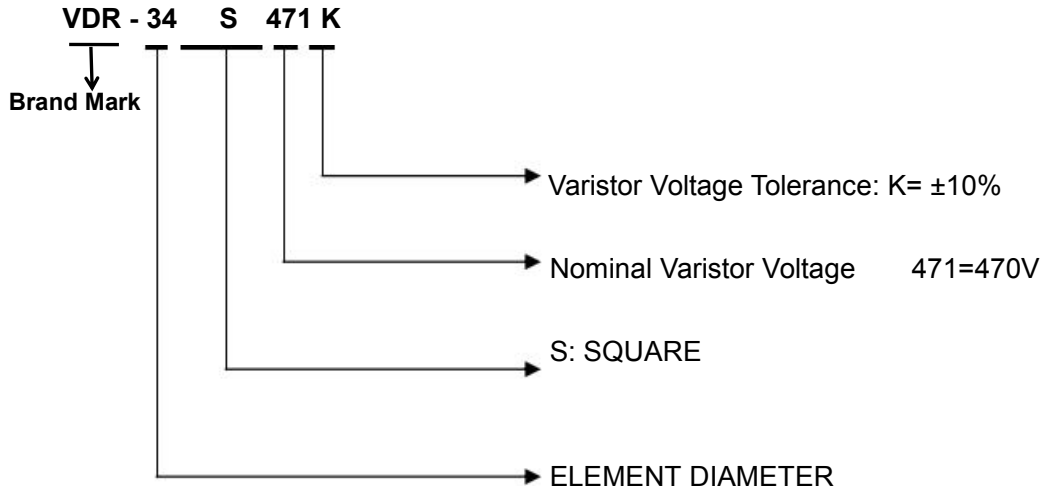
- Wide operating voltage (V1mA) range from 200V to 1800V
- Fast responding to transient over-voltage
- Large absorbing transient energy capability
- Low clamping ratio and no follow-on current
- Meets MSL level 1, per J-STD-020
- Operating Temperature: -40°C ~ +85°C
- Storage Temperature: -40°C ~ +125°C
- 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	Standard MOV	Delivery Time
VDR-34S130~VDR-34S1100	32days	VDR-34S201K~VDR-34S182K	32days

Electrical Characteristics

Part Number Marking	Ordering Code	Maximum Allowable Voltage		Varistor Voltage $V_{1mA}(V)$	Maximum Clamping Voltage		Max Surge Current $I_{8/20\mu s}$	Surge Operating Duty Test IEC 61643-11 (8/20 μs)		Maximum Energy 10/1000 μs (J)	Safety Certification UL /CUL
		V_{AC}	V_{DC}		$I_P(A)$	$V_C(V)$		I_{max}	I_n		
VDR 34S130	VDR-34S201K	130V	170V	200(180~220)	300	340	40KA	40KA	20KA	330	√
VDR 34S140	VDR-34S221K	140	180V	220(198~242)	300	360	40KA	40KA	20KA	360	√
VDR 34S150	VDR-34S241K	150	200V	240(216~264)	300	395	40KA	40KA	20KA	390	√
VDR 34S175	VDR-34S271K	175	225V	270(243~297)	300	455	40KA	40KA	20KA	420	√
VDR 34S190	VDR-34S301K	190	250V	300(270~330)	300	500	40KA	40KA	20KA	460	-
VDR 34S210	VDR-34S331K	210	275V	330(297~363)	300	550	40KA	40KA	20KA	500	√
VDR 34S230	VDR-34S361K	230	300V	360(324~396)	300	595	40KA	40KA	20KA	510	√
VDR 34S250	VDR-34S391K	250	320V	390(351~429)	300	650	40KA	40KA	20KA	530	√
VDR 34S275	VDR-34S431K	275	350V	430(387~473)	300	710	40KA	40KA	20KA	600	√
VDR 34S300	VDR-34S471K	300	385V	470(423~517)	300	775	40KA	40KA	20KA	650	√
VDR 34S320	VDR-34S511K	320	415V	510(459~561)	300	845	40KA	40KA	20KA	700	√
VDR 34S350	VDR-34S561K	350	460V	560(504~616)	300	925	40KA	40KA	20KA	730	√
VDR 34S385	VDR-34S621K	385	505V	620(558~682)	300	1025	40KA	40KA	20KA	780	√
VDR 34S420	VDR-34S681K	420	560V	680(612~748)	300	1120	40KA	40KA	20KA	810	√
VDR 34S460	VDR-34S751K	460	615V	750(675~825)	300	1240	40KA	40KA	20KA	850	√
VDR 34S480	VDR-34S781K	485	640V	780(702~858)	300	1290	40KA	40KA	20KA	930	√
VDR 34S510	VDR-34S821K	510	670V	820(738~902)	300	1355	40KA	40KA	20KA	970	√
VDR 34S550	VDR-34S911K	550	745V	910(819~1001)	300	1500	40KA	40KA	20KA	1050	√
VDR 34S625	VDR-34S102K	625	825V	1000(900~1100)	300	1650	40KA	40KA	20KA	1120	√
VDR 34S680	VDR-34S112K	680	895V	1100(990~1210)	300	1815	40KA	40KA	20KA	1250	√
VDR 34S750	VDR-34S122K	750	980V	1200(1080~1320)	300	1980	40KA	40KA	20KA	1250	√
VDR 34S880	VDR-34S142K	880V	1140V	1400(1260~1540)	300	2310	40KA	40KA	20KA	1400	-
VDR 34S1000	VDR-34S162K	1000V	1280V	1600(1440~1760)	300	2640	40KA	40KA	20KA	1500	-
VDR 34S1100	VDR-34S182K	1100V	1465V	1800(1620~1980)	300	2970	40KA	40KA	20KA	1600	-

Dimension(mm)

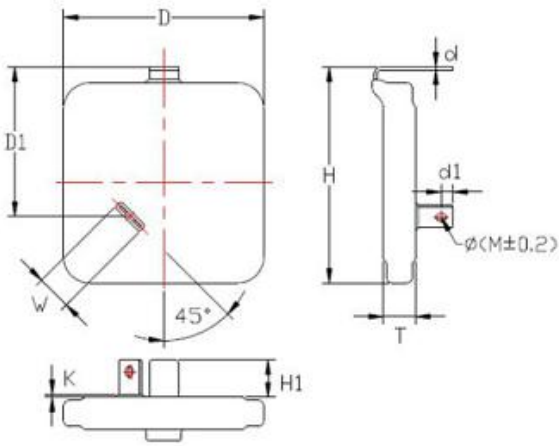


TABLE1		TABLE2	
Symbol	Dimensions	Part number	T(± 1.0 mm)
D(Max)	36.0mm	VDR 34S130	4.2mm
D1(Max)	20.0mm	VDR 34S140	4.2mm
Tmax	TABLE2	VDR 34S150	4.2mm
W	5.0mm ± 0.1	VDR 34S175	4.2mm
d	0.5mm ± 0.1	VDR 34S190	4.2mm
d1	1.8mm ± 0.1	VDR 34S210	4.3mm
H	37.0mm ± 1.0	VDR 34S230	4.3mm
H1	7.5mm ± 0.5	VDR 34S250	4.8mm
M	$\Phi 1.9$ mm ± 0.2	VDR 34S275	4.9mm
Epoxy Colour		VDR 34S300	4.8mm
		VDR 34S320	4.9mm
		VDR 34S350	5.0mm
		VDR 34S385	5.5mm
		VDR 34S420	6.0mm
		VDR 34S460	6.2mm
		VDR 34S480	6.5mm
		VDR 34S510	6.6mm
		VDR 34S550	6.8mm
		VDR 34S625	6.8mm
		VDR 34S680	7.3mm
		VDR 34S750	7.5mm
		VDR 34S880	8.0mm
		VDR 34S1000	8.5mm
		VDR 34S1100	9.0mm

Packing Information

Part Number	Quantity	Packaging Option
VDR-34S130 ~ VDR-34S350	60PCS	Foam box
VDR-34S385 ~ VDR-34S1100	40PCS	Foam box

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.