

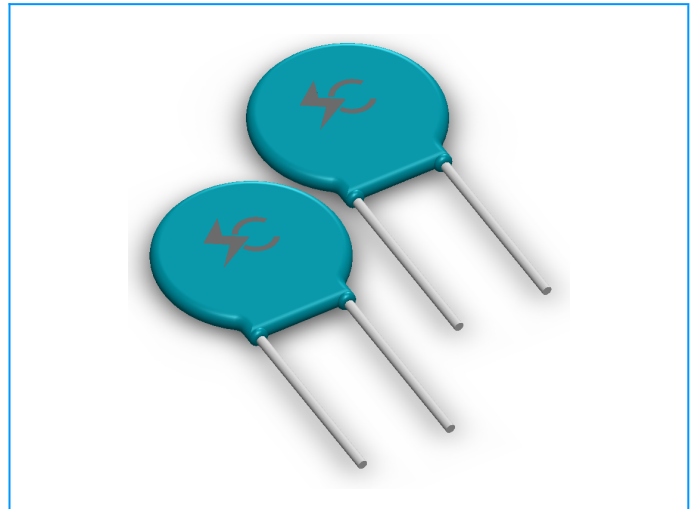
# Radial Lead Metal Oxide Varistor (MOV)

## 25D Series

### Description

The 25D series radial leaded varistors provides an ideal circuit protection solution for lower DC voltage applications by offering higher surge ratings than ever before available in such small discs.

The maximum peak surge current rating can reach up to 20KA (8/20  $\mu$ s pulse) to protect against high peak surges, including indirect lightning strike interference, system switching transients and abnormal fast transients from the power source.



### Features

- u Wide operating voltages ranging from 130Vac to 550Vac (170Vdc to 745Vdc).
- u Fast response time of less than 25ns, instantly clamping the transient over voltage.
- u High surge current handling capability.
- u High energy absorption capability.
- u Low clamping voltages, providing better surge protection.
- u Low capacitance values, providing digital switching circuitry protection.
- u High insulation resistance, preventing electric arching to the adjacent devices or circuits.

### Applications

- u Transistor, Diode, IC, Thyristor or Triac semiconductor protection.
- u Surge protection in consumer electronics.
- u Surge protection in industrial electronics.
- u Surge protection in electronic home appliances, gas and petroleum appliances.
- u Relay and electromagnetic valve surge absorption.

### General Characteristics

Operating Temperature	-40°C ~ +85°C
Storage Temperature	-40°C ~ +85°C
Working Surface Temperature	+115°C
Insulation Resistance	> 100M $\Omega$
Coating (Epoxy Resin)	Flame-Retardant to UL 94 V-0

### General Characteristics

Coating	Epoxy Resin
Lead Wire	The Copper Wire
Electrode	Silver Solder
Disk	Zinc Oxide

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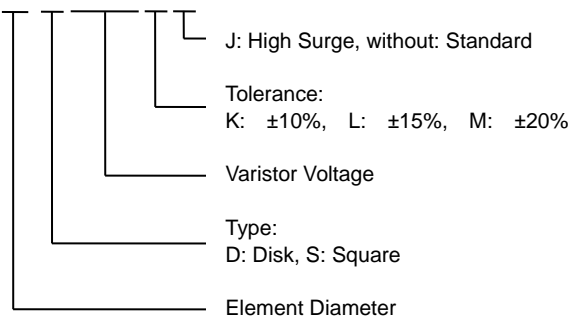
## 25D Series

### Specifications – General Characteristics (25±5°C)

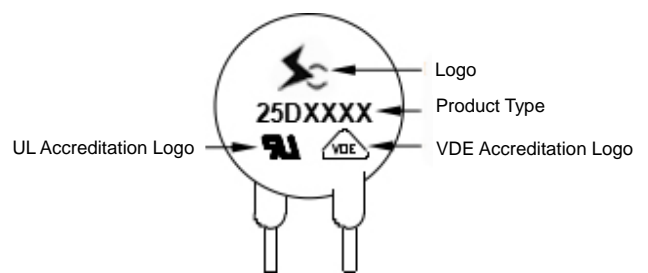
Type Number		Maximum Allowable voltage		Varistor Voltage	Maximum Clamping Voltage		Withstanding Surge Current 8/20µS		Rated Power	Energy (10/1000µs)	Capacitance
Standard	High Surge	VAC (V)	VDC (V)	V 1mA (V)	IP (A)	VC (V)	Standard (A)	High Surge (A)	(W)	(J)	@1KHZ (pF)
		1 Time					1 Time				
25D201K	25D201KJ	130	170	200(185-225)	150	330	15000	20000	1.0	215	2000
25D221K	25D221KJ	140	180	220(198-242)	150	360	15000	20000	1.0	235	1800
25D241K	25D241KJ	150	200	240(216-264)	150	395	15000	20000	1.0	245	1650
25D271K	25D271KJ	175	225	270(243-297)	150	455	15000	20000	1.0	260	1500
25D301K	25D301KJ	190	250	300(270-330)	150	505	15000	20000	1.0	275	1300
25D331K	25D331KJ	210	275	330(297-363)	150	550	15000	20000	1.0	295	1200
25D361K	25D361KJ	230	300	360(324-396)	150	595	15000	20000	1.0	305	1100
25D391K	25D391KJ	250	320	390(351-429)	150	650	15000	20000	1.0	335	1000
25D431K	25D431KJ	275	350	430(387-473)	150	710	15000	20000	1.0	365	930
25D471K	25D471KJ	300	385	470(423-517)	150	775	15000	20000	1.0	390	850
25D511K	25D511KJ	320	415	510(459-561)	150	845	15000	20000	1.0	440	780
25D561K	25D561KJ	350	460	560(504-616)	150	920	15000	20000	1.0	490	715
25D621K	25D621KJ	385	505	620(558-682)	150	1025	15000	20000	1.0	540	650
25D681K	25D681KJ	420	560	680(612-748)	150	1120	15000	20000	1.0	570	600
25D751K	25D751KJ	460	615	750(675-825)	150	1240	15000	20000	1.0	590	530
25D781K	25D781KJ	485	640	780(702-858)	150	1290	15000	20000	1.0	620	510
25D821K	25D821KJ	510	670	820 (738-902)	150	1355	15000	20000	1.0	655	500
25D911K	25D911KJ	550	745	910 (819-1001)	150	1500	15000	20000	1.0	726	440

### Part Numbering

#### 25 D XXX K J



### Part Marking



### Packaging Information

Dimension	Part Number	Bag	Small Carton	Carton
25D	25DXXXXX	100	1000	2000

# Radial Lead Metal Oxide Varistor (MOV)

## 25D Series

Package Dimensions Unit: mm

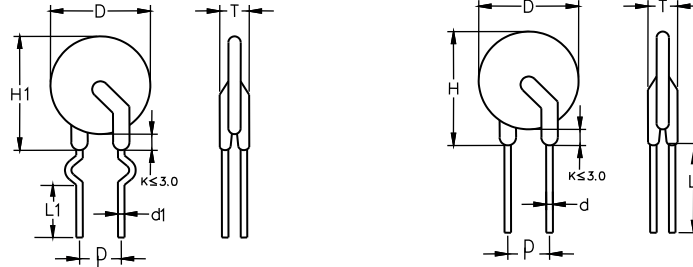


TABLE1

Symbol	Dimensions
H(max.)	31.0
H1(max.)	31.0
L(min.)	20.0
L1(min.)	20.0
D(max.)	29.0
P(±0.8)	10.0
T(max.)	TABLE2
d(±0.05)	1.0
d1(±0.05)	1.0

TABLE2

Model	T(max.)	Model	T(max.)
201K	4.1	471K	5.6
221K	4.2	511K	5.8
241K	4.3	561K	6.2
271K	4.5	621K	6.4
301K	4.7	681K	6.4
331K	4.8	751K	6.5
361K	5.0	781K	6.8
391K	5.1	821K	7.2
431K	5.3	911K	7.6