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## Radial Lead Varistor (MOV)

### Description

The 40D 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 30KA (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

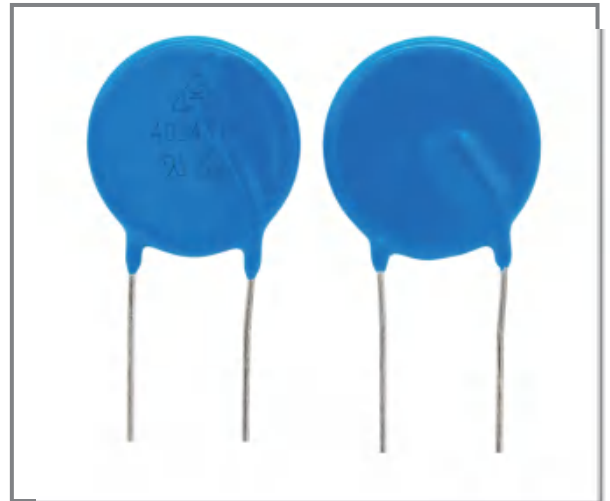
- ◆ Wide operating voltage (V1mA) range from 200V to 1800V(DC)
- ◆ Fast responding to transient over-voltage
- ◆ Large absorbing transient energy capability
- ◆ Low clamping ratio and no following-on current
- ◆ Meets MSL level 1, per J-STD-020

### Applicable

- ◆ 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.
- ◆ Approval Standard and File Number: UL/CUL: E489912

### General Characteristics

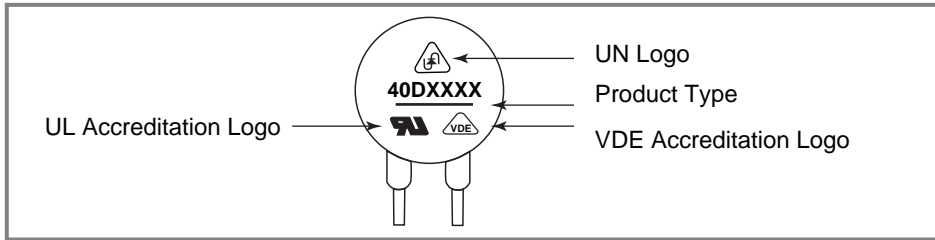
Material	No Radioactive Material
Operating Temperature	-40~85°C
Storage Temperature	-40~125°C
Body	Nickel Plated
Leads	Tin Plated
Devices with No lead	Nickel Plated



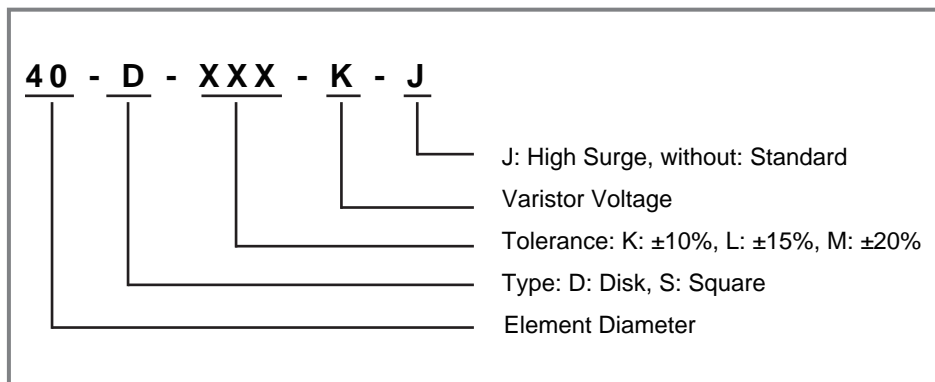
Electrical Characteristics (@ 25°C Unless Otherwise Specified)

Part Number		Maximum Allowable Voltage		Varistor Voltage	Withstanding Surge Current 8/20 $\mu$ S		Max Clamping Voltage		Maximum Energy (10/1000 $\mu$ s)		Rated Power
Standard	High Surge	V <sub>Ac</sub> (V)	V <sub>Dc</sub> (V)	V <sub>1mA</sub> (V)	I(A) Standard	I(A) High Surge	V <sub>C</sub> (V)	I <sub>P</sub> (A)	(J) Standard	(J) High Surge	(W)
					1 time	1 time					
40D201K	40D201KJ	130	170	200(185-225)	40000	50000	340	300	370	407	2.1
40D221K	40D221KJ	140	180	220(198-242)	40000	50000	360	300	400	440	2.1
40D241K	40D241KJ	150	200	240(216-264)	40000	50000	395	300	430	473	2.1
40D271K	40D271KJ	175	225	270(243-297)	40000	50000	455	300	470	517	2.1
40D301K	40D301KJ	190	250	300(270-330)	40000	50000	505	300	510	561	2.1
40D331K	40D331KJ	210	275	330(297-363)	40000	50000	550	300	550	605	2.1
40D361K	40D361KJ	230	300	360(324-396)	40000	50000	595	300	570	627	2.1
40D391K	40D391KJ	250	320	390(351-429)	40000	50000	650	300	590	649	2.1
40D431K	40D431KJ	275	350	430(387-473)	40000	50000	710	300	660	726	2.1
40D471K	40D471KJ	300	385	470(423-517)	40000	50000	775	300	720	792	2.1
40D511K	40D511KJ	320	415	510(459-561)	40000	50000	845	300	770	847	2.1
40D561K	40D561KJ	350	460	560(504-616)	40000	50000	920	300	810	891	2.1
40D621K	40D621KJ	385	505	620(558-682)	40000	50000	1025	300	860	946	2.1
40D681K	40D681KJ	420	560	680(612-748)	40000	50000	1120	300	900	990	2.1
40D751K	40D751KJ	460	615	750(675-825)	40000	50000	1240	300	940	1034	2.1
40D781K	40D781KJ	485	640	780(702-858)	40000	50000	1290	300	980	1078	2.1
40D821K	40D821KJ	510	670	820(738-902)	40000	50000	1355	300	1080	1188	2.1
40D911K	40D911KJ	550	745	910(819-1001)	40000	50000	1500	300	1150	1265	2.1
40D102K	40D102KJ	625	825	1000(900-1100)	40000	50000	1650	300	1260	1386	2.1
40D112K	40D112KJ	680	895	1100(990-1210)	40000	50000	1815	300	1380	1518	2.1
40D122K	40D122KJ	750	990	1200(1080~1320)	40000	50000	1980	300	1460	1606	2.1
40D142K	40D142KJ	880	1140	1400(1260~1540)	40000	50000	2310	300	1550	1705	2.1
40D162K	40D162KJ	1000	1280	1600(1400~1760)	40000	50000	2475	300	1700	1870	2.1
40D182K	40D182KJ	1100	1465	1800(1620-1980)	40000	50000	2970	300	1800	1980	2.1

### Part Marking



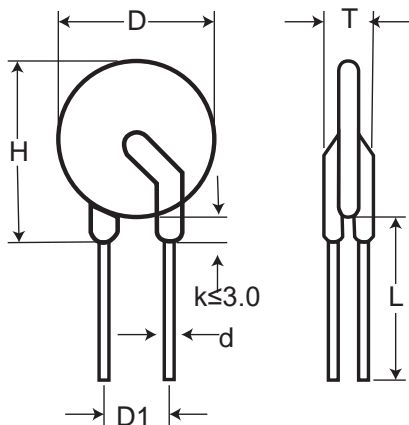
### Part Numbering



### Packaging Information

Part Number	Quantity	Packaging Option	Packaging Specification
40DXXXXX	50	BOX	Bulk Pack

### Package Dimensions Unit: mm



Symbol	Dimension
H(max.)	44.0
L(min.)	25.0
D(max.)	41.0
D1( $\pm 1.0$ )	23.0
T(max.)	12.5
d ( $\pm 0.1$ )	1.42

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