

53D Series



Description

The 53D 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 70KA (8/20 μ 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 voltage (V1mA) range from 200V to1800V
- u Fast responding to transient over-voltage
- u Large absorbing transient energy capability
- u Low clamping ratio and no following-on current

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

Material	No Radioactive Material
Operating Temperature	-55~85°C
Storage Temperature	-55~125°C
Body	Nickel Plated
Leads	Tin Plated
Devices with No lead	Nickel Plated

53D Series



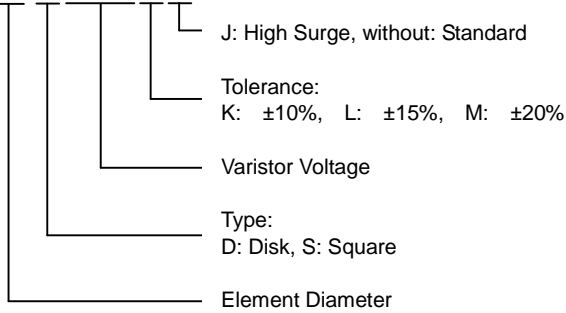
Type Number	Maximum Allowable voltage		Varistor Voltage	Maximum Clamping Voltage		Withstanding Surge Current	Maximum Energy (10/1000 μ s)	Rated Power
	V _{AC} (V)	V _{DC} (V)		V 1mA (V)	I _P (A)			
53D201K	130	170	200(180~220)	150	340	70000	550	1.6
53D221K	140	180	220(198~242)	150	360	70000	600	1.6
53D241K	150	200	240(216~264)	150	395	70000	650	1.6
53D271K	175	225	270(243~297)	150	455	70000	700	1.6
53D301K	190	250	300(270~330)	150	500	70000	765	1.6
53D331K	210	275	330(297~363)	150	550	70000	825	1.6
53D361K	230	300	360(324~396)	150	595	70000	850	1.6
53D391K	250	320	390(351~429)	150	650	70000	885	1.6
53D431K	275	350	430(387~473)	150	710	70000	990	1.6
53D471K	300	335	470(423~517)	150	775	70000	1080	1.6
53D511K	320	415	510(459~561)	150	845	70000	1150	1.6
53D561K	350	460	560(504~616)	150	925	70000	1200	1.6
53D621K	385	505	620(558~682)	150	1025	70000	1300	1.6
53D681K	420	560	680(612~748)	150	1120	70000	1350	1.6
53D751K	460	615	750(675~825)	150	1240	70000	1400	1.6
53D781K	485	640	780(702~858)	150	1290	70000	1450	1.6
53D821K	510	670	820(738~902)	150	1355	70000	1600	1.6
53D911K	550	745	910(819~1001)	150	1500	70000	1700	1.6
53D102K	625	825	1000(900~1100)	150	1650	70000	1890	1.6
53D112K	680	895	1100(990~1210)	150	1814	70000	2050	1.6
53D122K	750	990	1200(1080~1320)	150	1980	70000	2050	1.6
53D152K	900	1200	1500(1350~1650)	150	2475	70000	2300	1.6
53D182K	1000	1465	1800(1620~1980)	150	2970	70000	2500	1.6

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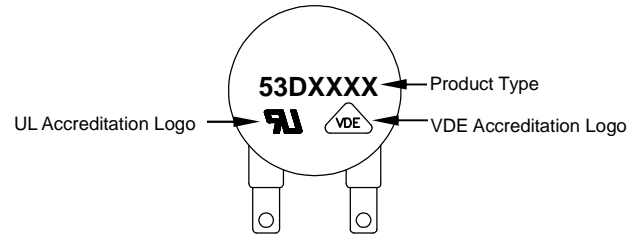


Part Numbering

53 D XXX K J



Part Marking



Packaging Information

Part Number	Quantity	Packaging Option	Packaging Specification
53DXXXXXX	250	BOX	Bulk Pack

Package Dimensions Unit: mm

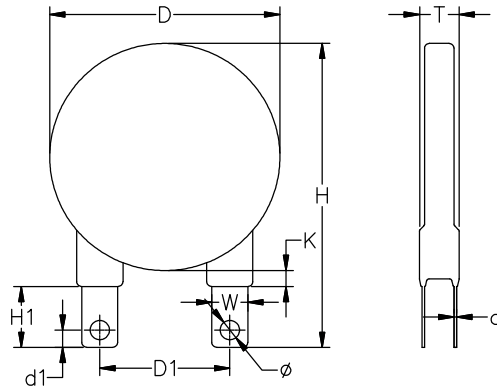


TABLE1

Symbol	Dimensions
H(max.)	78.2
H1(max.)	16.5
D(max.)	60.0
D1(±1.0)	25.4
T(max.)	TABLE 2
d(±0.1)	0.5
d1±0.3)	3.4
K(max.)	3.18
W(±0.5)	9.7
φ(±0.2)	4.15

TABLE2

Model	T(max.)	Model	T(max.)
330K	6.1	391K	7.4
390K	6.3	431K	7.6
470K	6.5	471K	7.9
560K	6.8	511K	8.1
680K	7.1	561K	8.4
820K	5.8	621K	8.8
101K	5.9	681K	9.1
121K	6.1	751K	9.5
151K	6.4	781K	9.7
181K	6.2	821K	9.9
201K	6.3	911K	10.5
221K	6.4	951K	10.7
241K	6.5	102K	11.3
271K	6.7	112K	11.9
301K	6.9	122K	12.4
331K	7.0	142K	13.4
361K	7.2	162K	14.4