

METAL OXIDE VARISTORS

SDVxxxKD07

FEATURE

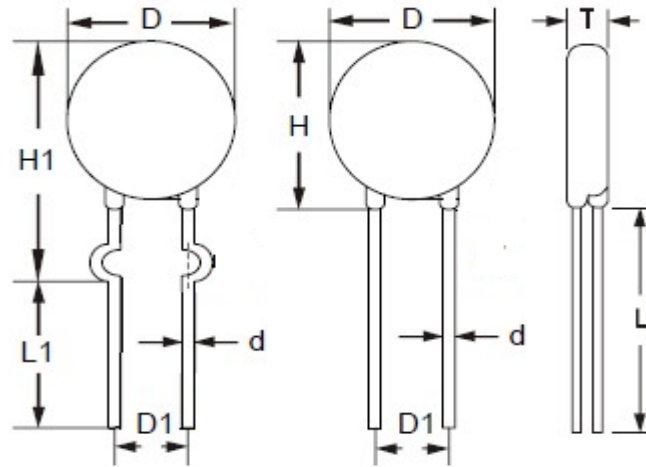
- Fast response to transient over-voltage and limited current;
- Capable of absorbing high transient energies;
- Low clamping ratio and no follow current.

APPLICATION

- Consumer and industrial electronics;
- Electronic home appliances, gas and petroleum appliances;
- Relay and electromagnetic valve surge absorption,

ELECTRICAL CHARACTERISTICS

Part Number	Maximum Allowable Voltage		Varistor Voltage	Maximum Clamping Voltage		Withstanding Surge Current		Rated Power	Maximum Energy 10/1000 μ s		Typical Capacitance (Reference)
	V _{AC}	V _{DC}	V _{1mA}	I _p	V _C	Standard	High Surge		Standard	High Surge	@ 1kHz
	V	V	V	A	V	A	A	W	J	J	pF
180KD07	11	14	18(15~21.6)	2.5	36	250	500	0.02	0.9	2.0	2800
220KD07	14	18	22(19.5~26)	2.5	43				1.1	2.4	2300
270KD07	17	22	27(24~31)	2.5	53				1.4	3.0	1800
330KD07	20	26	33(29.5~36.5)	2.5	65				1.7	3.5	1500
390KD07	25	31	39(35~43)	2.5	77				2.1	4.0	1300
470KD07	30	38	47(42~52)	2.5	93				2.5	5.0	1100
560KD07	35	45	56(50~62)	2.5	110				3.1	6.0	890
680KD07	40	56	68(61~75)	2.5	135				3.6	7.0	740
820KD07	50	65	82(74~90)	10	135	1200	1750	0.25	5.5	10.0	600
101KD07	60	85	100(90~110)	10	165				6.5	12.0	500
121KD07	75	100	120(108~132)	10	200				7.8	13.0	420
151KD07	95	125	150(135~165)	10	250				9.7	13.0	330
181KD07	115	150	180(162~198)	10	300				11.7	16.0	280
201KD07	130	170	200(180~220)	10	340				13.0	17.0	250
221KD07	140	180	220(198~242)	10	360				14.0	19.0	230
241KD07	150	200	240(216~264)	10	395				15.0	21.0	210
271KD07	175	225	270(243~297)	10	455				18.0	24.0	185
301KD07	190	250	300(270~330)	10	500				20.0	26.0	165
331KD07	210	275	330(297~363)	10	550	23.0	28.0	150			
361KD07	230	300	360(324~396)	10	595	25.0	32.0	140			

PACKAGE DIMENSIONS (unit: mm)


Symbol	H(max.)	H1(max.)	L(min)	L1(min)	D(max.)	D1(±0.8)	d(±0.05)				
Dimensions	12.5	13.5	20.0	15.0	9.0	5.0	0.6				
T(max)											
180K	4.5	470K	4.9	121K	4.5	241K	4.6	391K	5.4	621K	7.1
220K	4.6	560K	5.0	151K	4.8	271K	4.9	431K	5.7	681K	7.3
270K	4.7	680K	5.2	181K	4.3	301K	5.0	471K	6.0	751K	7.1
330K	4.9	820K	4.1	201K	4.4	331K	5.1	511K	6.2	781K	7.3
390K	4.8	101K	4.3	221K	4.5	361K	5.2	561K	6.5	821K	7.5

ELECTRICAL RATINGS

Item	Test Condition/Description	Requirement
Varistor Voltage	The voltage between two terminals with the specified measuring current 1mA DC applied	To meet the specified value
Maximum Allowable Voltage	The recommended maximum sine wave or the maximum DC voltage can be applied continuously	
Maximum Clamping Voltage	The maximum voltage between two terminals with the specification standard impulse current. Applied wave: 8/20μs	
Rate Power	The maximum average power that can be applied within the specified ambient temperature	
Energy	The maximum energy within the varistor voltage change of ±10% when one impulse of 10/1000μs or 2 ms is applied.	
Withstanding Surge Current	The maximum current within the varistor voltage change of ±10% with the standard impulse current (8/20□sec.) applied one time.	
Varistor Voltage Temp. Coefficient	$\frac{Vb \text{ at } 20^{\circ}C - Vb \text{ at } 70^{\circ}C}{Vb \text{ at } 20^{\circ}C} \times \frac{1}{50} \times 100(\% ^{\circ}C)$	0.05%/°C max