



惠州市嵩隆力上电子
SONGLONG LISHANG

P d c S c ca

Customer				
Approved Item	VDR-07D			
Customer P/N				
Lead form	S	a	C	d () Y K I C d
Packing	B	A	R	
Approval Standard	40028836	E317616	12001076478	ISO9001/2008
And File Number				
Standard	IEC 61051 / UL 1449 TYPE 5			
	GB/T10193-1997GB/T10194-1997			
Issue Data / REV	2018/9/20		A1	
Special description				

SONGLONG ELECTRONICS

		APPROVAL BY
		S C
Customer		
	CHECKED BY	APPROVAL BY

Ta a c	C a Fac
() C a MFG I c No.450,ZhongZhen 3rd RD., Yingge Dist., New Taipei City 23942, Taiwan (R.O.C.) 450 TEL : 886-2-26797267 FAX : 886-2-26785358	HUIZHOU SHI SONGLONG LISHANG ELECTRONICS CO.,LTD Heng-Ling Developing Distict ,SatianTown, Hui-Yang,Hui-Zhou,Guang Dong Province, P.R.C. TEL:0752-3728085 FAX:0752-3728399

SONGLONG LISHANG

07D SERIES

M E

FEATURES

- * Wide operating voltage (V1mA) range from 18V to 820V.
- * 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 ISO9001-2018
- * Safety number : E317616 VDE-40028836 CQC-12001076478

APPLICATION

- * 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.

G a C a ac c D

- * Operating Temperature: (-40 °C ~+85 °C) & (-40 °C ~+125 °C)
- * Storage Temperature: (-40 °C ~ +125 °C)
- * Working Surface Temperature:
- * Insulation Resistance:
- * Coating (Epoxy R

Ma a

- * Coating:
- * Lead Wire:
- * Electrode:
- * Disk: Zinc Oxide

PART NUMBER CODE

VDR

D

K

B a d Ma

E

D a

T

:D: D

,

S: S a

Va

V a

Sa c :S a

S :NO:

CB:O b d

I:l b d

K:S a K

Y:H a d

J:H S

PH=U a S

TA: A , TR: R

1 =C b a a a

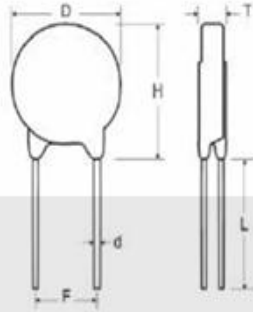
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T & G

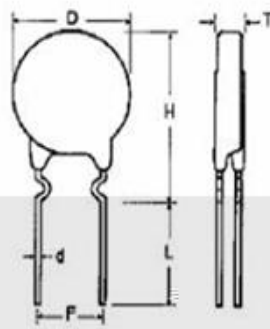


■ Dimensions

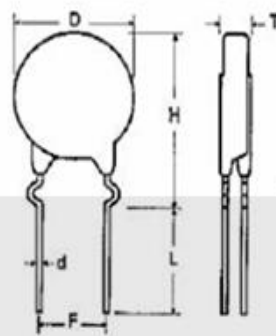
S Type(Straight Lead)



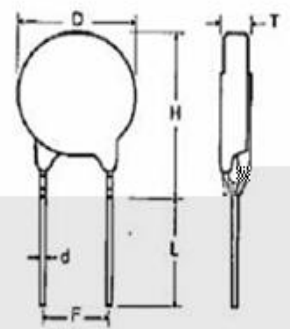
I Type(Inner Crimped Lead)



C Type(Out Crimped Lead)



Y Lead Type(Y Kink Lead)



Unit: mm

Pa N .	Pa N .	T Ma .	D Ma .	H Ma .			L .	F 0.8	d ± 0.05
				S	I / C / Y				
VDR-07D180L	VDR-07D180LJ	4.5	9.0	11.0	14.0	20.0	5.0	0.6	
VDR-07D220K	VDR-07D220KJ	4.6							
VDR-07D270K	VDR-07D270KJ	4.7							
VDR-07D330K	VDR-07D330KJ	4.9							
VDR-07D390K	VDR-07D390KJ	4.8							
VDR-07D470K	VDR-07D470KJ	4.9							
VDR-07D560K	VDR-07D560KJ	5.0							
VDR-07D680K	VDR-07D680KJ	5.2							
VDR-07D820K	VDR-07D820KJ	4.1							
VDR-07D101K	VDR-07D101KJ	4.3							
VDR-07D121K	VDR-07D121KJ	4.5							
VDR-07D151K	VDR-07D151KJ	4.8							
VDR-07D181K	VDR-07D181KJ	4.3							
VDR-07D201K	VDR-07D201KJ	4.4							
VDR-07D221K	VDR-07D221KJ	4.5							
VDR-07D241K	VDR-07D241KJ	4.6							
VDR-07D271K	VDR-07D271KJ	4.9							
VDR-07D301K	VDR-07D301KJ	5.0							
VDR-07D331K	VDR-07D331KJ	5.1							
VDR-07D361K	VDR-07D361KJ	5.2							
VDR-07D391K	VDR-07D391KJ	5.4							
VDR-07D431K	VDR-07D431KJ	5.7							
VDR-07D471K	VDR-07D471KJ	6.0							
VDR-07D511K	VDR-07D511KJ	6.2							
VDR-07D561K	VDR-07D561KJ	6.5							
VDR-07D621K	VDR-07D621KJ	7.1							
VDR-07D681K	VDR-07D681KJ	7.3							
VDR-07D751K	VDR-07D751KJ	7.5							
VDR-07D781K	VDR-07D781KJ	7.7							
VDR-07D821K	VDR-07D821KJ	8.0							



ELECTRICAL

ISTIC

Pa N b		Ma A ab V a		Va V a	Ma Ca V a	W a d S C		E 10/1000 S		Ra d P	I ca Ca ac a c (R c)	
S a da d	H S	AC (V)	DC (V)	V1 A(V)	IP(A)	VC(V)	I(A) S a da d	I(A) H S	(J) S a da d	(J) H S	(W)	@1KH PF
07D180L	07D180LJ	11	14	18(15.3~20.7)	2.5	36	250	500	0.9	2.0	0.02	2800
07D220K	07D220KJ	14	18	22(19.8~24.2)	2.5	43	250	500	1.1	2.4	0.02	2300
07D270K	07D270KJ	17	22	27(24.3~29.7)	2.5	53	250	500	1.4	3.0	0.02	1800
07D330K	07D330KJ	20	26	33(29.7~36.3)	2.5	65	250	500	1.7	3.5	0.02	1500
07D390K	07D390KJ	25	31	39(35.1~42.9)	2.5	77	250	500	2.1	4.0	0.02	1300
07D470K	07D470KJ	30	38	47(42.3~51.7)	2.5	93	250	500	2.5	5.0	0.02	1100
07D560K	07D560KJ	35	45	56(50.4~61.6)	2.5	110	250	500	3.1	6.0	0.02	890
07D680K	07D680KJ	40	56	68(61.2~74.8)	2.5	135	250	500	3.6	7.0	0.02	740
07D820K	07D820KJ	50	65	82(73.8~90.2)	10	135	1200	1750	5.5	10	0.25	600
07D101K	07D101KJ	60	85	100(90~110)	10	165	1200	1750	6.5	12	0.25	500
07D121K	07D121KJ	75	100	120(108~132)	10	200	1200	1750	7.8	12	0.25	420
07D151K	07D151KJ	95	125	150(135~165)	10	250	1200	1750	9.7	13	0.25	330
07D181K	07D181KJ	115	150	180(162~198)	10	300	1200	1750	11.7	16	0.25	280
07D201K	07D201KJ	130	170	200(185~225)	10	330	1200	1750	13	17	0.25	250
07D221K	07D221KJ	140	180	220(198~242)	10	360	1200	1750	14	19	0.25	230
07D241K	07D241KJ	150	200	240(216~264)	10	395	1200	1750	15	21	0.25	210
07D271K	07D271KJ	175	225	270(243~297)	10	455	1200	1750	18	24	0.25	185
07D301K	07D301KJ	190	250	300(270~330)	10	505	1200	1750	20	26	0.25	165
07D331K	07D331KJ	210	275	330(297~363)	10	550	1200	1750	23	28	0.25	150
07D361K	07D361KJ	230	300	360(324~396)	10	595	1200	1750	25	32	0.25	140
07D391K	07D391KJ	250	320	390(351~429)	10	650	1200	1750	25	35	0.25	130
07D431K	07D431KJ	275	350	430(387~473)	10	710	1200	1750	28	40	0.25	115
07D471K	07D471KJ	300	385	470(423~517)	10	770	1200	1750	31	42	0.25	105
07D511K	07D511KJ	320	415	510(459~561)	10	830	1200	1750	33	45	0.25	100
07D561K	07D561KJ	350	460	560(504~616)	10	890	1200	1750	36	49	0.25	90
07D621K	07D621KJ	385	505	620(558~682)	10	950	1200	1750	39	55	0.25	80
07D681K	07D681KJ	420	560	680(612~748)	10	1010	1200	1750	42	60	0.25	75
07D751K	07D751KJ	460	615	750(675~825)	10	1240	1200	1750	65	67	0.25	70
07D781K	07D781KJ	485	640	780(702~858)	10	1290	1200	1750	65	67	0.25	70
07D821K	07D821KJ	510	670	820(738~902)	10	1355	1200	1750	65	70	0.25	60

Terminal Pull Strength After gradually applying the load specified below and keep the unit fixed for ten seconds, the terminal shall be visually examined for any damage.

Terminal Bending Strength The unit shall be secured with its terminal kept vertical. A weight specified below be applied in the axial direction. The terminal shall gradually be bent by 90° in one direction, then in the opposite direction, and again back to the original position. The damage of the terminal shall be visually examined.

Vibration The Specimen shall be vibrated by its lead wires with a varying frequency of 10~55~10HZ(each minutes) for 10 minutes in each X,Y and Z directions.

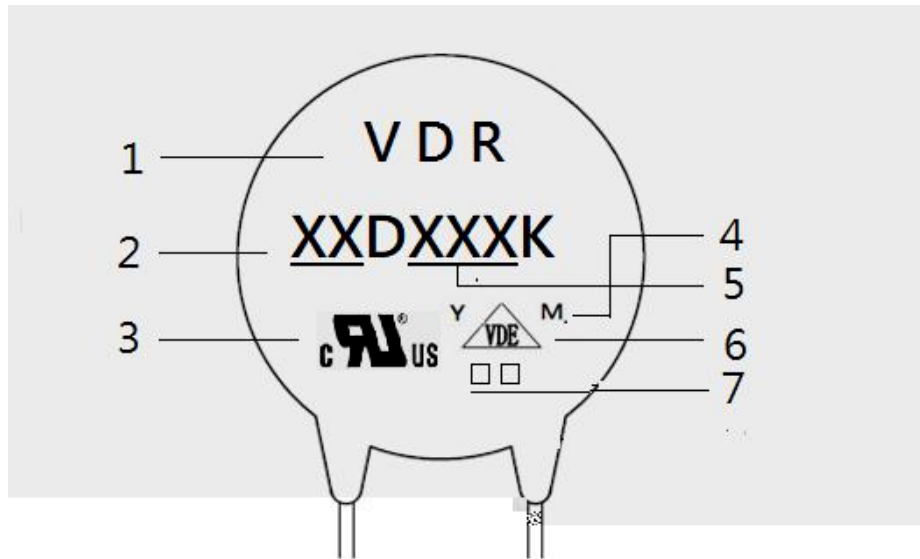
Soldering-solderability After dipping the terminal to depth of approximately 3mm in a solder bath of 260 °C for 10±1(D5: 5±1) seconds. Thereafter the specimen shall be visually examined.


Soldering-Resistance to Solder Heat After preheating the specimen, the specimen shall be dipped in a soldering bath having a temperature of 260±5 °C for 10±0.5 seconds. Thereafter the specimen shall be dipped in a solder bath of 400±5 °C for 3±0.5 seconds. There after the change of the specimen shall be examined.

ENVIRONMENTAL RATINGS

Dry Heat Loading The specimen shall be continuously the maximum temperature specified for a specified period and then stored at 25±5 °C and 50% humidity for 24 hours. After, the change of the specimen shall be examined.

MARKING CODE



- 1 SongLong Lishang Logo
- 2 Disk Size
- 3  Accreditation Logo
- 4 “Y” & “M” Product Line Code
- 5 Varistor Voltage
- 6 VDE Accreditation Logo
- 7 “J” is High Surge Code, not “J” is Standard Surge
“H” is High temperature range, not “H” is Standard

Packaging specification / bulk packaging quantity

Unit:Pcs

Dimension	Part No.	Bag	Small Carton	Carton
07D	180L to 821K	1,000	10,000	20,000
07D (Short leg)	180L to 821K	1,000	15,000	30,000