



Applications

- Surge protection in consumer electronics.
- Surge protection in industrial electronics.
- Surge protection in electronics home
- Appliances, gas and petroleum appliances.
- Relay and electromagnetic valve surge absorption

Features

- RoHS compliant
- Varistor Voltage (V1mA) range from 100V to 820V.
- Fast responding to transient over-voltage.
- Large absorbing transient energy capability.
- Low clamping ratio and no following-on current.

Part Number Code

0	7	D	4	7	1	K	J	
Chip Diameter 芯片直径		Chip Shape 芯片形状	Varistor Voltage 压敏电阻动态电压			Tolerance 误差	High Surge/Lead Style 高焦/脚型	
05	Φ5mm	圆形 Disc	Examples: 例如			K ±10% L ±15% M ±20% or Customer Special Requirement	<input type="checkbox"/> 空白常规 <input type="checkbox"/> J 高能品	
07	Φ7mm		4	7	0			
10	Φ10mm		4	7	1	47*10 ¹ =470V		
14	Φ14mm		1	1	2	11*10 ² =1100V		
20	Φ20mm							
25	Φ25mm							



Mechanical Requirements

Solderability	Min. 95% of The Terminal Should Be Covered With Solder Uniformly	Solder Temp: 265±5°C Immersed Time: 2±0.5Sec.
Resistance of soldering heat	$\Delta V1mA/V1mA \leq \pm 5\%$	Solder Temp: 260±5°C
		Immersed Time: 10±1Sec.

Environmental Requirements

High Temperature Storage	$\Delta V1mA/V1mA \leq \pm 5\%$	Ambient Temp: 125±2°C Duration: 1000h		
Low Temperature Storage	$\Delta V1mA/V1mA \leq \pm 5\%$	Ambient Temp: 125±2°C Duration: 1000h		
High Humidity Storage/Damp Heat	$\Delta V1mA/V1mA \leq \pm 5\%$	Ambient Temp: 125±2°C Duration: 1000h		
Temperature Cycle	$\Delta V1mA/V1mA \leq \pm 5\%$	Step	Temperature	Period
		1	-50°C	30min
		2	Room Temp	15min
		3	150°C	30min
		4	Room Temp	15min
High Temperature Load	$\Delta V1mA/V1mA \leq \pm 10\%$	Ambient temp: 85±2°C Duration: 1000h Load: Max. Allowable Voltage		
High Humidity Load	$\Delta V1mA/V1mA \leq \pm 10\%$	Ambient Temp: 125±2°C Duration: 1000H Load: MAX. Allowable Voltage		
Operating Temperature Range	-40°C ~ +85°C	-40°C ~ +85°C		
Storage Temperature Range	-40°C ~ +125°C	-40°C ~ +125°C		



Characteristics at Ta = 25°C

Type Number		Maximum Allowable Voltage		Varistor Voltage V _{1mA}	Maximum Clamping Voltage		Withstanding Surge Current		Maximum Energy		Rated Power W	Typical Capacitance (Reference) @1KHz(pF)
		V _{AC} V	V _{DC} V		I _T A	V _C V	I(A) Standard	I(A) High Surge	I(A) Standard	I(A) High Surge		
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	13	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(180~220)	10	340	1200	1750	13.0	17	0.25	250
07D221K	07D221KJ	140	180	220(198~242)	10	360	1200	1750	14.0	19	0.25	230
07D241K	07D241KJ	150	200	240(216~264)	10	395	1200	1750	15.0	21	0.25	210
07D271K	07D271KJ	175	225	270(243~297)	10	455	1200	1750	18.0	24	0.25	185
07D301K	07D301KJ	190	250	300(270~330)	10	500	1200	1750	20.0	26	0.25	165
07D331K	07D331KJ	210	275	330(297~363)	10	550	1200	1750	23.0	28	0.25	150
07D361K	07D361KJ	230	300	360(324~396)	10	595	1200	1750	25.0	32	0.25	140
07D391K	07D391KJ	250	320	390(351~429)	10	650	1200	1750	25.0	35	0.25	130
07D431K	07D431KJ	275	350	430(387~473)	10	710	1200	1750	28.0	40	0.25	115
07D471K	07D471KJ	300	385	470(423~517)	10	775	1200	1750	30.0	42	0.25	105
07D511K	07D511KJ	320	415	510(459~561)	10	845	1200	1750	30.0	45	0.25	100
07D561K	07D561KJ	350	460	560(504~616)	10	925	1200	1750	30.0	49	0.25	90
07D621K	07D621KJ	385	505	620(558~682)	10	1025	1200	1750	33.0	55	0.25	80
07D681K	07D681KJ	420	560	680(612~748)	10	1120	1200	1750	33.0	60	0.25	75
07D751K	07D751KJ	460	345	750(675~825)	10	1240	1200	1750	67.2	65	0.25	70
07D781K	07D781KJ	485	640	780(702~858)	10	1290	1200	1750	67.2	65	0.25	70
07D821K	07D821KJ	510	670	820(738~902)	10	1355	1200	1750	67.2	70	0.25	60

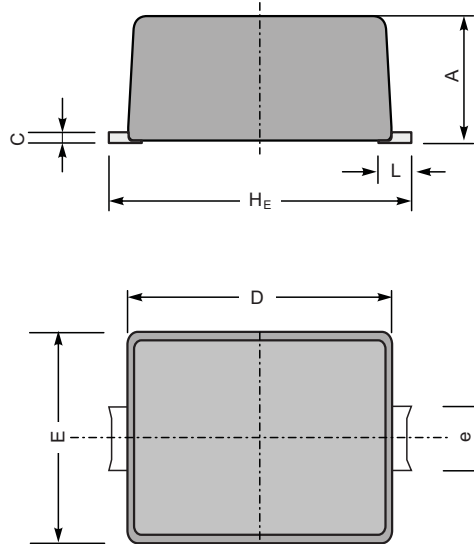
Remark: Voltage > 33V, K is +10%



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMDY



UNIT		A	H _E	D	E	e	C	L
mm	max	4.2	11	10	8.7	2.7	0.15 (ref)	0.5 (ref)
	min	3.8	10.6	9.6	8.3	2.3		
mil	max	165	433	394	343	106	9.8 (ref)	20 (ref)
	min	150	417	378	302	90.5		

The recommended mounting pad size

