

規格承認書

SPECIFICATION FOR APPROVAL

Rev1.0	SPECIFICATION	NO.		
PART NO.	ZOV32D201K~162K	PAGE: 1 OF 5		
		DATE: 2017年10月18日		
UL	E315524	CSA	LR115266	VDE /

1.OUTLINE

1.1 DIMENSIONS

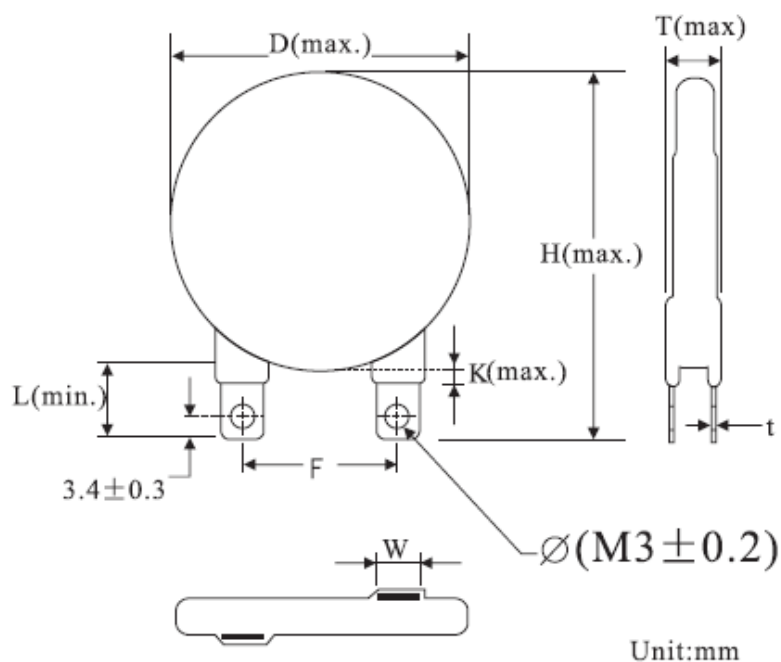


Table1

Unit:mm	
Symbol	Dimension
D(max.)	38.0
H(max.)	56.3
F(±1.0)	25.4
T(max.)	Table2
t(±0.25)	0.5
L(min.)	14.5
K(max.)	3.2
W(±0.5)	7.0
ΦM3(±0.2)	3.2
Epoxy Colour : Green	

Table2

Unit:mm			
Model	T	Model	T
201K	6.2	751K	9.4
241K	6.4	781K	9.6
271K	6.6	821K	9.8
331K	6.9	911K	10.4
361K	7.1	951K	10.6
391K	7.3	102K	11.2
431K	7.5	112K	11.8
471K	7.8	122K	12.3
511K	8.0	142K	13.3
621K	8.7	162K	14.3
681K	9.0		

規格承認書

SPECIFICATION FOR APPROVAL

Rev1.0	SPECIFICATION	NO.			
PART NO.	ZOV32D201K~162K	PAGE: 2 OF 5			
		DATE: 2017年10月18日			
UL	E315524	CSA	LR115266	VDE	/

Electrical characteristics

ZOV Part Number	Maximum Allowable Voltage		Varistor voltage V1.0 mA (V)	IR3 μA	@	Maximum Clamping Voltage		Withstanding Surge Current		Maximum Ebergt (JOULE) 10/1000μs	Typical Capacitance (Reference) @1KHz (pf)
	Ac.rm s (V)	DC (V)				VC (V)	IP (A)	1 time (A)	2 times (A)		
32D201K	130	170	200(185-225)	40	21	340	200	25000	20000	250	5200
32D241K	150	200	240(216-264)			395				290	5100
32D271K	175	225	270(243-297)			455				300	4800
32D331K	210	275	330(297-363)			550				360	4300
32D361K	230	300	360(324-396)			595				380	3900
32D391K	250	320	390(351-429)			650				400	3200
32D431K	275	350	430(387-473)			710				430	3100
32D471K	300	385	470(423-517)			775				460	2800
32D511K	320	415	510(459-561)			845				510	2700
32D621K	385	505	620(558-682)			1025				570	2400
32D681K	420	560	680(612-748)			1120				600	2200
32D751K	460	615	750(675-825)			1240				620	2000
32D781K	485	640	780(702-858)			1290				660	1900
32D821K	510	670	820(738-902)			1355				700	1800
32D911K	550	745	910(819-1001)			1500				750	1300
32D951K	575	765	950(855-1045)			1570				780	1200
32D102K	625	825	1000(900-1100)			1650				810	1100
32D112K	680	895	1100(990-1210)			1815				910	1000
32D122K	750	990	1200(1080-1320)			1980				960	920
32D142K	880	1140	1400(1260-1540)			2310				1020	800
32D162K	1000	1280	1600(1440-1760)	2640	1080	700					

規格承認書

SPECIFICATION FOR APPROVAL

Rev1.0	SPECIFICATION	NO.			
PART NO.	ZOV32D201K~162K	PAGE: 3 OF 5			
		DATE: 2017年10月18日			
UL	E315524	CSA	LR115266	VDE	/

2.ELETRICAL PARAMETER

2.1	Max. Allowable Voltage	Reference p2*	At 1.0mA DC
2.2	Varistor Voltage(Test Time For 30ms)		V0.1mA □ V1mA ■
2.3	Rated Wattage		
2.4	Max. Clamping Voltage		Test Current Waveform 8/20μs
2.5	Withstanding Surge Current		Test Current Waveform 8/20μs
2.6	Max. Energy		Test Current Waveform 10/1000μs
2.7	Typical Capacitance		@1KHz
2.8	Leakage Current		At 80% of Varistor Voltage
2.9	Nonlinear Exponent (α)		$\alpha = \log \frac{I_1}{I_2} / \log \frac{V_1}{V_2}$
2.10	Impulse Life		≅ ±10%(V1mA)

3.MATERIAL LIST

3.1	Drawing	略		
3.2	Material Chart RoHs	Item	Composition	Manufacturer
		Coating	Epoxy Resin	Made in China, and in line with the UL 94-V0 testing, meet the environmental requirements
		Lead	Cu wire	Made in China, meet the environmental requirements
		Electrode	Silver	Made in China, meet the environmental requirements
		Disk	Zinc Oxide	Made in China, meet the environmental requirements
		Solder	Sn:96.5%CU 0.5%Ag3.0%	Made in China, meet the environmental requirements

規格承認書

SPECIFICATION FOR APPROVAL

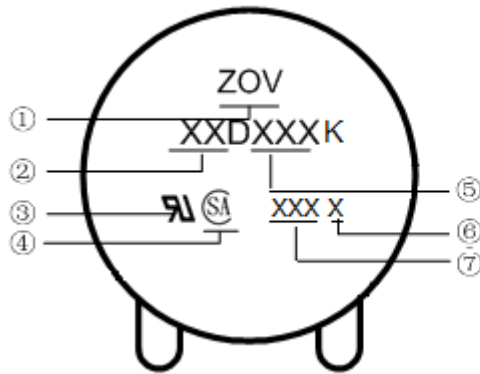
Rev1.0	SPECIFICATION	NO.			
PART NO.	ZOV32D201K~162K	PAGE: 4 OF 5			
		DATE: 2017年10月18日			
UL	E315524	CSA	LR115266	VDE	/
4.MECHANICAL REQUIREMENTS					
4.1	Tensile of Terminations	No Outstanding Damage	1.0Kgf; 10Sec.		
4.2	Bending of Terminations	No Outstanding Damage	0.5Kgf; 90° ,3 Times		
4.3	Vibration	No Outstanding Damage	Freq:10-55hz;Amp:0.75mm,1Min		
4.4	Solderability	Min. 95% of The Terminal Should Be Covered With Solder Uniformly	Solder Temp:245±5°C Immersed Time: ≤5Sec.		
4.5	Resistance of soldering heat	$\Delta V1mA/V1mA$ $\cong \pm 5\%$	Solder Temp: 260±5°C Immersed Time: 10±1Sec.		
5.ENVIRONMENTAL REQUIREMENTS					
5.1	High Temperature Storage	$\Delta V1mA/V1mA$ $\cong \pm 5\%$	Ambient Temp: 125±2°C Duration:1000h		
5.2	Low Temperature Storage	$\Delta V1mA/V1mA$ $\cong \pm 5\%$	Ambient Temp: -40±2°C Duration:1000h		
5.3	High Humidity Storage/Damp Heat	$\Delta V1mA/V1mA$ $\cong \pm 5\%$	Ambient Temp: 40±2°C 90-95% R.H. Duration:1000h		
5.4	Temperature Cycle	$\Delta V1mA/V1mA$ $\cong \pm 5\%$	Step	Temperature (°C)	Period (min)
			1	-40±3	30 ±3
			2	Room Temp	15 ±3
			3	85±3	30 ±3
4	Room Temp	15 ±3			
5.5	High Temperature Load	$\Delta V1mA/V1mA$ $\cong \pm 10\%$	Ambient temp:85±2°C Duration:1000h Load: MAX. Allowable Voltage		
5.6	High Humidity Load	$\Delta V1mA/V1mA$ $\cong \pm 10\%$	Ambient Temp: 40±2°C 90-95%R.H.Duration:1000H Load: MAX. Allowable Voltage		
5.7	Operating Temperature Range	-40°C ~ +85°C			
5.8	Storage Temperature Range	-40°C ~ +125°C			

規格承認書

SPECIFICATION FOR APPROVAL

Rev1.0	SPECIFICATION		NO.		
PART NO.	ZOV32D201K~162K		PAGE: 5 OF 5		
			DATE: 2017年10月18日		
UL	E315524	CSA	LR115266	VDE	/

6. MARKING CODE



- ① ZOV Logo
- ② Disk Size
- ③ UL Accreditation Logo
- ④ CSA Accreditation Logo
- ⑤ Varistor Voltage
- ⑥ Special standard P: Normal code
- ⑦ Date Code

7. QUANTITY

Packaging Dimensions (Unit: mm)	Quantity
Bulk 	60pcs/box (201K~511K)
	32pcs/box (621K~162K)