

SIOV metal oxide varistors

Strap varistors, HighE, standard, LS40 series

Series/Type: B722*
Date: April 2011

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Construction

- Rectangular varistor element as in SIOV-B40
- Coating: epoxy resin, flame-retardant to UL 94 V-0
- Bolt-holed strap terminals for screw fixing or soldering
- Bent or straight strap terminals

Features

- High surge current up to 40 kA
- Wide operating voltage range 130 ... 750 V_{RMS}
- PSpice models

Approvals

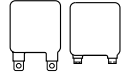
- UL
- CSA
- CECC (K150 ... K385)

Delivery mode

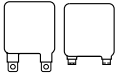
- Vacuum-packed styrofoam box

General technical data

Climatic category	to IEC 60068-1	40/85/56	
Operating temperature	to CECC 42 000	-25 ... + 85	°C
Storage temperature		-25 ... +110	°C
Electric strength	to CECC 42 000	≥ 2.5	kV _{RMS}
Insulation resistance	to CECC 42 000	≥ 10	MΩ
Response time		< 25	ns

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Electrical specifications and ordering codes
Maximum ratings ($T_A = 85\text{ }^\circ\text{C}$)

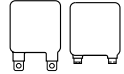
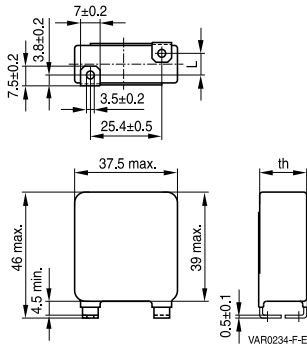
Ordering code	Type	V_{RMS}	V_{DC}	i_{max} (8/20 μ s)	W_{max} (2 ms)	P_{max}
	SIOV-	V	V	A	J	W
Bent strap terminals						
B72240L0131K100	LS40K130QP	130	170	40000	310	1.4
B72240L0141K100	LS40K140QP	140	180	40000	340	1.4
B72240L0151K100	LS40K150QP	150	200	40000	360	1.4
B72240L0231K100	LS40K230QP	230	300	40000	460	1.4
B72240L0251K100	LS40K250QP	250	320	40000	490	1.4
B72240L0271K100	LS40K275QP	275	350	40000	550	1.4
B72240L0321K100	LS40K320QP	320	420	40000	640	1.4
B72240L0381K100	LS40K385QP	385	505	40000	800	1.4
B72240L0421K100	LS40K420QP	420	560	40000	910	1.4
B72240L0441K100	LS40K440QP	440	585	40000	950	1.4
B72240L0461K100	LS40K460QP	460	615	40000	960	1.4
B72240L0551K100	LS40K550QP	550	745	40000	960	1.4
B72240L0681K100	LS40K680QP	680	895	40000	1100	1.4
B72240L0751K100	LS40K750QP	750	970	40000	1200	1.4
Straight strap terminals						
B72240L0131K102	LS40K130QPK2	130	170	40000	310	1.4
B72240L0141K102	LS40K140QPK2	140	180	40000	340	1.4
B72240L0151K102	LS40K150QPK2	150	200	40000	360	1.4
B72240L0231K102	LS40K230QPK2	230	300	40000	460	1.4
B72240L0251K102	LS40K250QPK2	250	320	40000	490	1.4
B72240L0271K102	LS40K275QPK2	275	350	40000	550	1.4
B72240L0321K102	LS40K320QPK2	320	420	40000	640	1.4
B72240L0381K102	LS40K385QPK2	385	505	40000	800	1.4
B72240L0421K102	LS40K420QPK2	420	560	40000	910	1.4
B72240L0441K102	LS40K440QPK2	440	585	40000	950	1.4
B72240L0461K102	LS40K460QPK2	460	615	40000	960	1.4
B72240L0551K102	LS40K550QPK2	550	745	40000	960	1.4
B72240L0681K102	LS40K680QPK2	680	895	40000	1100	1.4
B72240L0751K102	LS40K750QPK2	750	970	40000	1200	1.4


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Characteristics (T_A = 25 °C)

Ordering code	V _v (1 mA) V	ΔV _v (1 mA) %	V _{C,max} (i _C) V	i _C A	C _{typ} (1 kHz) pF
Bent strap terminals					
B72240L0131K100	205	±10	340	300	5600
B72240L0141K100	220	±10	365	300	5200
B72240L0151K100	240	±10	395	300	4800
B72240L0231K100	360	±10	595	300	3200
B72240L0251K100	390	±10	650	300	2900
B72240L0271K100	430	±10	710	300	2700
B72240L0321K100	510	±10	840	300	2300
B72240L0381K100	620	±10	1025	300	1900
B72240L0421K100	680	±10	1120	300	1800
B72240L0441K100	715	±10	1180	300	1700
B72240L0461K100	750	±10	1240	300	1600
B72240L0551K100	910	±10	1500	300	1400
B72240L0681K100	1100	±10	1815	300	1100
B72240L0751K100	1200	±10	2000	300	1000
Straight strap terminals					
B72240L0131K102	205	±10	340	300	5600
B72240L0141K102	220	±10	365	300	5200
B72240L0151K102	240	±10	395	300	4800
B72240L0231K102	360	±10	595	300	3200
B72240L0251K102	390	±10	650	300	2900
B72240L0271K102	430	±10	710	300	2700
B72240L0321K102	510	±10	840	300	2300
B72240L0381K102	620	±10	1025	300	1900
B72240L0421K102	680	±10	1120	300	1800
B72240L0441K102	715	±10	1180	300	1700
B72240L0461K102	750	±10	1240	300	1600
B72240L0551K102	910	±10	1500	300	1400
B72240L0681K102	1100	±10	1815	300	1100
B72240L0751K102	1200	±10	2000	300	1000

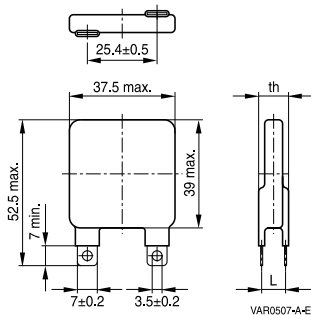
Varistor elements without coating (suitable for soldering) are available upon request.

Designation: B72240D***K***


Dimensional drawings
Bent strap terminals


SIOV-LS40K ... QP

Weight: 20 ... 50 g

Straight strap terminals


SIOV-LS40K ... QPK2

Weight: 20 ... 50 g

Ordering code	th _{max} mm	L ±1.0 mm
Bent strap terminals		
B72240L0131K100	8.1	-3.5
B72240L0141K100	8.2	-3.3
B72240L0151K100	8.3	-3.2
B72240L0231K100	9.0	-2.0
B72240L0251K100	9.2	-1.8
B72240L0271K100	9.4	-1.6
B72240L0321K100	9.9	-1.1
B72240L0381K100	10.6	-0.4
B72240L0421K100	10.9	0.0
B72240L0441K100	11.1	0.2
B72240L0461K100	11.4	0.4
B72240L0551K100	12.3	1.2
B72240L0681K100	13.5	2.4
B72240L0751K100	14.1	3.0
Straight strap terminals		
B72240L0131K102	8.1	4.4
B72240L0141K102	8.2	4.5
B72240L0151K102	8.3	4.6
B72240L0231K102	9.0	5.4
B72240L0251K102	9.2	5.6
B72240L0271K102	9.4	5.8
B72240L0321K102	9.9	6.3
B72240L0381K102	10.6	6.9
B72240L0421K102	10.9	7.3
B72240L0441K102	11.1	7.6
B72240L0461K102	11.4	7.8
B72240L0551K102	12.3	8.8
B72240L0681K102	13.5	9.9
B72240L0751K102	14.1	10.5