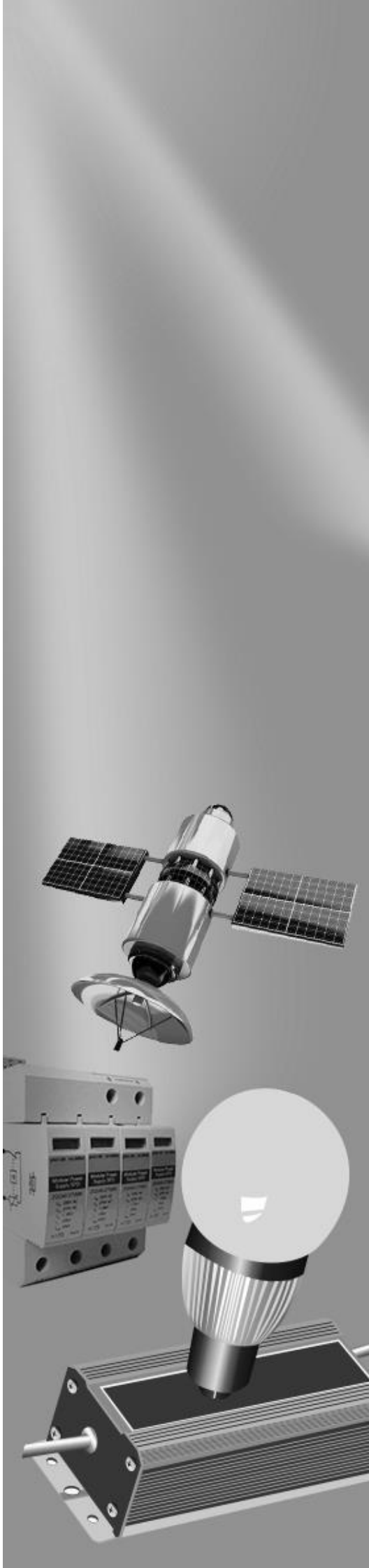
Innovative Service Around the Globe YAGEO

DATA SHEET

METAL OXIDE VARISTORS
POWER SUPPLY

34S series

RoHS compliant & Halogen free



Product specification– April 25, 2024 V.2

Metal Oxide Varistor (MOV) Data Sheet

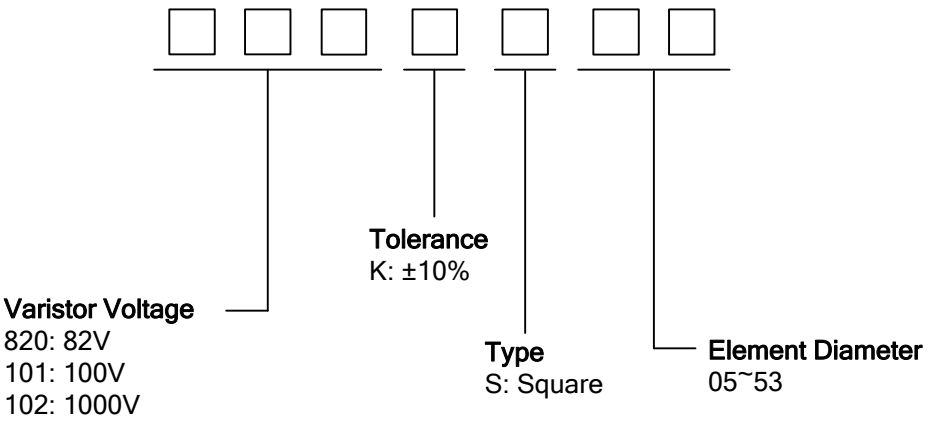
Features

- Wide operating voltage (V_{1mA}) range from 82V to 1600V
- 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
- Operating Temperature：-40℃ ~ +105℃
- Storage Temperature：-40℃ ~ +125℃
- Safety certification: UL: E327997
  CSA: 246579

Applications

- 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

Part number code



Dimensions

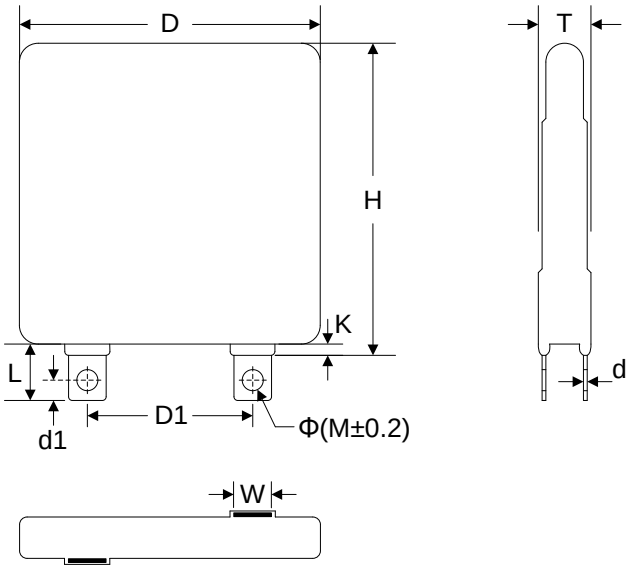


TABLE 1 Unit: mm	
Symbol	Dimension
H(max.)	40.0
L(min.)	14.5
D(max.)	38.0
D1(±1.0)	25.4
T(max.)	TABLE 2
d(±0.25)	0.5
d1(±0.3)	3.7
K(max.)	3.2
W(±0.5)	7.0
ΦM(±0.2)	3.2

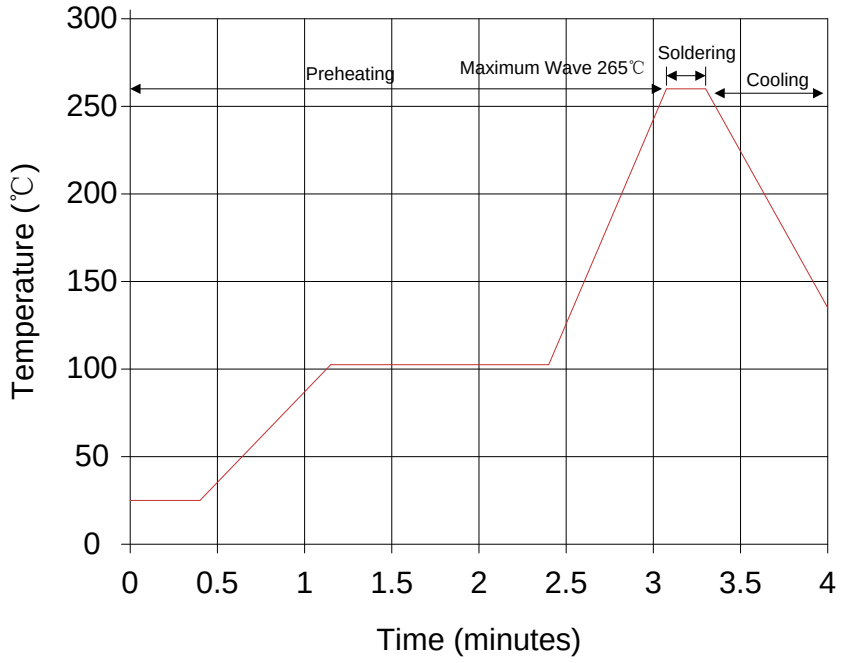
TABLE 2 Unit: mm			
Model	T(max.)	Model	T(max.)
820K	5.9	511K	8.0
101K	6.1	561K	8.3
121K	6.3	621K	8.7
151K	6.6	681K	9.0
181K	6.3	751K	9.4
201K	6.2	781K	9.6
221K	6.3	821K	9.8
241K	6.4	911K	10.4
271K	6.6	951K	10.6
301K	6.8	102K	11.2
331K	6.9	112K	11.8
361K	7.1	122K	12.3
391K	7.3	142K	13.3
431K	7.5	162K	14.3
471K	7.8		

Electrical characteristics

Part Number	Maximum Allowable Voltage		Varistor Voltage	Maximum Clamping Voltage		Withstanding Surge Current	Maximum Energy (10/1000μs)	Typical Capacitance (Reference)
	V_{AC}(V)	V_{DC}(V)	V_{1mA}(V)	I_P(A)	V_C(V)	I (A)	(J)	@1KHz (pf)
820KS34	50	65	82(74~90)	300	135	30000	156	17950
101KS34	60	85	100(90~110)	300	165	30000	195	15000
121KS34	75	100	120(108~132)	300	200	40000	235	12200
151KS34	95	125	150(135~165)	300	250	40000	296	10000
181KS34	115	150	180(162~198)	300	300	40000	350	8250
201KS34	130	170	200(180~220)	300	340	40000	330	8000
221KS34	140	180	220(198~242)	300	360	40000	360	7800
241KS34	150	200	240(216~264)	300	395	40000	390	7600
271KS34	175	225	270(243~297)	300	455	40000	420	7200
301KS34	190	250	300(270~330)	300	500	40000	460	7000
331KS34	210	275	330(297~363)	300	550	40000	500	6400
361KS34	230	300	360(324~396)	300	595	40000	510	6000
391KS34	250	320	390(351~429)	300	650	40000	530	4800
431KS34	275	350	430(387~473)	300	710	40000	600	4600
471KS34	300	385	470(423~517)	300	775	40000	650	4100
511KS34	320	415	510(459~561)	300	845	40000	700	4000
561KS34	350	460	560(504~616)	300	925	40000	730	3800
621KS34	385	505	620(558~682)	300	1025	40000	780	3600
681KS34	420	560	680(612~748)	300	1120	40000	810	3300
751KS34	460	615	750(675~825)	300	1240	40000	850	3000
781KS34	485	640	780(702~858)	300	1290	40000	930	2850
821KS34	510	670	820(738~902)	300	1355	40000	970	2700
911KS34	550	745	910(819~1001)	300	1500	40000	1050	2100
951KS34	575	765	950(855~1045)	300	1570	40000	1080	1900
102KS34	625	825	1000(900~1100)	300	1650	40000	1120	1700
112KS34	680	895	1100(990~1210)	300	1815	40000	1250	1520
122KS34	750	990	1200(1080~1320)	300	1980	40000	1340	1400
142KS34	880	1140	1400(1260~1540)	300	2310	40000	1400	1200
162KS34	1000	1280	1600(1440~1760)	300	2640	40000	1500	1100

Soldering Recommendation

Lead-free Wave Soldering Recommendation

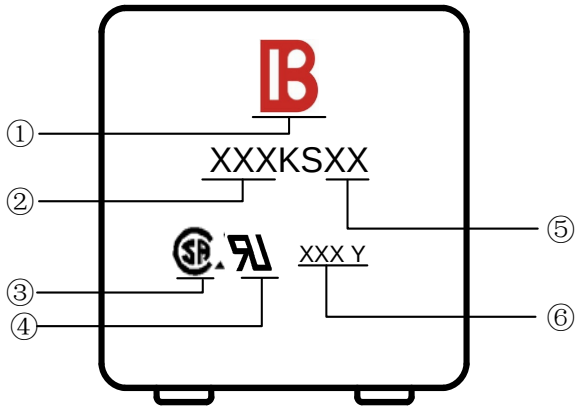


Item	Conditions
Peak Temperature	265℃
Dipping Time	10 seconds (max.)
Soldering	1 time

Recommendation Reworking Conditions with Soldering Iron

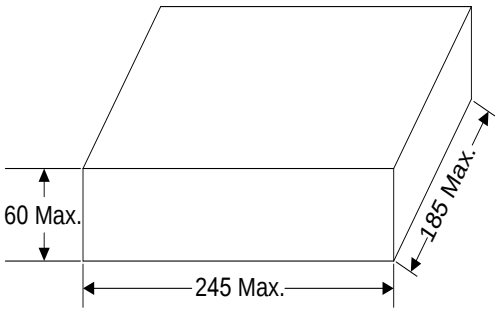
Item	Conditions
Temperature of Soldering Iron-tip	360℃ (max.)
Soldering Time	3 seconds (max.)
Distance from Varistor	2mm (min.)

Marking code



① Brightking Logo
② Varistor Voltage
③ CSA Accreditation Logo
④ UL Accreditation Logo
⑤ Disk Size
⑥ Internal control code

Quantity

Packaging Dimensions (Unit: mm)	Quantity
Bulk 	60pcs/box (820K~511K)
	32pcs/box (561K~102K)
	28pcs/box (112K~162K)

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