HITANO ENTERPRISE CORP. ®

METAL OXIDE VARISTORS

Transient voltage surge suppressors

K Series

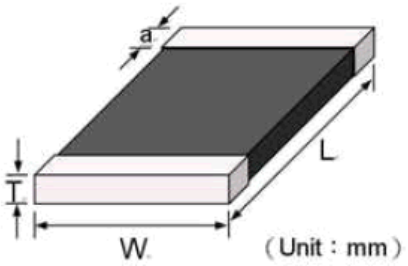
A Type High surge absorption

Hitano Part no.	Working Voltage (MAX)		Breakdown Voltage	Peak Current	Clamping Voltage (MAX)		Energy Absorption	Typical Capacitance	Thickness
Condition Unit	AC (V_{RMS})	DC (V)	1mA (V)	8/20μs (A)	(A)	(V)	10/1000 (J)	1KHz (pF)	mm
3220SL680KA	40	56	68(61.2~74.8)	1000	5	124	5.5	1700	1.80 max
3220SL121KA	75	102	120(108~132)	1000	10	198	11.2	900	1.80 max
3220SL151KA	95	127	150(135~165)	1000	10	248	14.0	700	1.80max

C Type Wide Range Application

Hitano Part no.	Working Voltage (MAX)		Breakdown Voltage	Peak Current	Clamping Voltage (MAX)		Energy Absorption	Typical Capacitance	Thickness
Condition Unit	AC (V_{RMS})	DC (V)	1mA (V)	8/20μs (A)	(A)	(V)	10/1000 (J)	1KHz (pF)	mm
3220SL560KC	35	45	56(50.4~61.6)	500	5	106	2.50	1250	1.80 max
3220SL680KC	40	56	68(61.2~74.8)	500	5	124	3.20	1050	1.80 max
3220SL820KC	50	65	82(73.8~90.2)	500	5	135	3.85	800	1.80 max
3220SL121KC	75	102	120(108~132)	500	10	198	6.00	600	1.80 max
3220SL151KC	95	127	150(135~165)	500	10	248	7.50	470	1.80 max
3220SL241KC	150	200	240(216~264)	500	10	390	14.5	380	2.00 max
3220SL271KC	175	225	270(243~297)	500	10	450	16.0	340	2.00 max
3220SL391KC	250	330	390(351~429)	500	10	647	20.0	125	2.30 max
3220SL431KC	275	369	430(387~473)	450	10	705	21.0	120	2.30 max
3220SL471KC	300	385	470(423~517)	400	10	775	21.6	115	2.30 max

K Series



Type	Length L	Width W	Electrode A
3220SL(mm)	8.1±0.30	5.0±0.30	0.8+0.5/-0.1
3220SL(inches)	0.315±0.118	0.20±0.118	0.0315+0.196/-0.039

• Environmental Characteristics

Item	Requirement	Test Method
High Temperature Storage	Change of varistor voltage: ±10%	The varistor shall be subjected to 125±2℃ for 1000±12 hrs in thermostatic bath without load and then stored at room temperature and normal humidity for 1 – 2 hours
Temperature cycle	Change of varistor voltage: ±10% and no mechanical damage.	The temperature cycle shall be repeated five times then stored at room temperature and normal humidity for 1 – 2hours Step / Temperature / Period 1 / -40±3℃ / 30±3 min 2 / Room Temperature / 1 hour 3 / 125±3℃ / 30±3 min 4 / Room Temperature / 1 hour
High Temperature Load	Change of varistor voltage: ±10%	Applied maximum allowable voltage for 1000±2 hrs at 85±2℃, the varistor shall be stored at room temperature and normal humidity for 1 – 2 hours.
Damp Heat Load	Change of varistor voltage: ±10%	Applied maximum allowable voltage for 1000±2 hrs at 40±2℃, 90-95% R.H., the varistor shall be stored at room temperature and normal humidity for 1 – 2 hours.
Low Temperature Storage	Change of varistor voltage: ±10%	The varistor should be subjected to -40±2℃