

Metal Oxide Varistors

Surface Mount



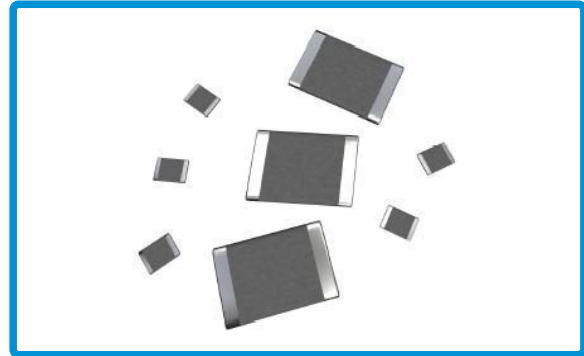
MVS Series

MERITEK

■ MVS-B Series (Surface Mount Device)

• Features

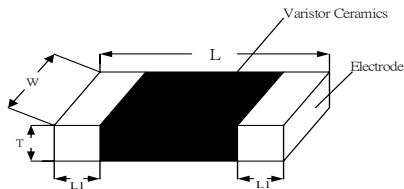
1. EIA size 0402 ~ 2220
2. Working voltage: 5.5 ~ 85 Vdc
3. -40 ~ +125°C operating temperature range
4. Bidirectional and symmetrical V/I characteristics
5. Multilayer ceramic construction technology
6. Cost effective



• Recommended Applications

1. Cellular phones
2. Mother board / notebook
3. Scanner
4. Handheld devices
5. Digital video
6. Set-top box

• Dimensions



(Unit:mm)

Part No	L	W	T	L1
MVS0402	1.00±0.15	0.50±0.10	0.60max	0.20±0.10
MVS0603	1.60±0.15	0.80±0.05	0.95max	0.25±0.15
MVS0805	2.00±0.20	1.25±0.20	1.20max	0.40±0.20
MVS1206	3.20±0.30	1.60±0.20	1.50max	0.50±0.20
MVS1210	3.20±0.30	2.50±0.25	1.50max	0.50±0.20
MVS1812	4.50±0.40	3.20±0.30	1.50max	0.60±0.30
MVS2220	5.70±0.40	5.00±0.30	2.00max	0.60±0.30

• Characteristics

Part No.	Varistor Voltage		Max Allowable Voltage		Max. Clamping Voltage (8/20µs)		Max. Surge Current (8/20µs)	Max. Energy (10/1000µs)	Rate Power	Reference Capacitance @1KHz
	V _{1mA} (V)	ΔV _{1mA} (±%)	V _{AC(rms)} (V)	V _{DC} (V)	V _p (V)	I _p (A)	I _{max} (A)	W _{max} (J)	P (W)	C (PF)
MVS0402B080M	8	20	4	5.5	19	1.0	10	0.05	0.003	230
MVS0603B080M	8	20	4	5.5	19	1.0	30	0.1	0.003	950
MVS0805B080M	8	20	4	5.5	19	1.0	60	0.1	0.005	1500
MVS1206B080M	8	20	4	5.5	17	1.0	150	0.3	0.008	4800
MVS1210B080M	8	20	4	5.5	17	2.5	250	0.4	0.01	8200
MVS1812B080M	8	20	4	5.5	17	5.0	500	0.8	0.015	18000
MVS2220B080M	8	20	4	5.5	17	10	1000	1.4	0.02	29000
MVS0402B110M	11	20	6	8	27	1.0	10	0.05	0.003	160
MVS0603B110M	11	20	6	8	27	1.0	30	0.1	0.003	600
MVS0805B110M	11	20	6	8	27	1.0	60	0.2	0.005	1400
MVS1206B110M	11	20	6	8	25	1.0	200	0.4	0.008	3900
MVS1210B110M	11	20	6	8	25	2.5	300	0.7	0.01	7500
MVS1812B110M	11	20	6	8	25	5.0	500	1.0	0.015	15000
MVS2220B110M	11	20	6	8	25	10	1200	3.6	0.02	25000
MVS0402B12RM	12.5	20	7	9	30	1.0	10	0.05	0.003	140
MVS0603B12RM	12.5	20	7	9	30	1.0	30	0.1	0.003	570
MVS0805B12RM	12.5	20	7	9	30	1.0	60	0.2	0.005	1100

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	V _{1mA}	V _{1mA}	V _{AC(rms)}	V _{DC}	V _p	I _p	I _{max}	W _{max}	P	C
	(V)	(\pm %)	(V)	(V)	(V)	(A)	(A)	(J)	(W)	(PF)
MVS0402B150L	15	15	8	11	33	1.0	10	0.05	0.003	120
MVS0603B150L	15	15	8	11	33	1.0	30	0.1	0.003	520
MVS0805B150L	15	15	8	11	33	1.0	60	0.2	0.005	950
MVS1206B150L	15	15	8	11	30	1.0	200	0.5	0.008	2500
MVS1210B150L	15	15	8	11	30	2.5	400	1	0.01	4800
MVS1812B150L	15	15	8	11	30	5.0	800	1.8	0.015	10000
MVS2220B150L	15	15	8	11	30	10	1200	4.2	0.02	18000
MVS0402B180K	18	10	11	14	35	1.0	10	0.05	0.003	80
MVS0603B180K	18	10	11	14	35	1.0	30	0.2	0.003	220
MVS0805B180K	18	10	11	14	35	1.0	60	0.2	0.005	670
MVS1206B180K	18	10	11	14	33	1.0	200	0.5	0.008	1500
MVS1210B180K	18	10	11	14	33	2.5	400	1.2	0.01	2900
MVS1812B180K	18	10	11	14	33	5.0	800	1.9	0.015	5500
MVS2220B180K	18	10	11	14	33	10	1200	5.4	0.02	12000
MVS0402B220K	22	10	14	18	44	1.0	10	0.05	0.003	60
MVS0603B220K	22	10	14	18	40	1.0	30	0.2	0.003	300
MVS0805B220K	22	10	14	18	40	1.0	60	0.3	0.005	430
MVS1206B220K	22	10	14	18	38	1.0	200	0.5	0.008	1200
MVS1210B220K	22	10	14	18	38	2.5	400	1.5	0.01	2400
MVS1812B220K	22	10	14	18	38	5.0	800	2.3	0.015	5000
MVS2220B220K	22	10	14	18	38	10	1200	5.8	0.02	10000
MVS0402B270K	27	10	17	22	55	1.0	10	0.05	0.003	50
MVS0603B270K	27	10	17	22	46	1.0	30	0.2	0.003	180
MVS0805B270K	27	10	17	22	46	1.0	60	0.3	0.005	330
MVS1206B270K	27	10	17	22	44	1.0	200	0.6	0.008	1000
MVS1210B270K	27	10	17	22	44	2.5	400	1.7	0.01	2000
MVS1812B270K	27	10	17	22	44	5.0	800	2.7	0.015	4000
MVS2220B270K	27	10	17	22	44	10	1200	7.2	0.02	7700
MVS0402B330K	33	10	20	26	63	1.0	10	0.05	0.003	40
MVS0603B330K	33	10	20	26	56	1.0	30	0.2	0.003	150
MVS0805B330K	33	10	20	26	56	1.0	60	0.3	0.005	300
MVS1206B330K	33	10	20	26	54	1.0	200	0.7	0.008	800
MVS1210B330K	33	10	20	26	54	2.5	400	1.9	0.01	1300
MVS1812B330K	33	10	20	26	54	5.0	800	3.0	0.015	3200
MVS2220B330K	33	10	20	26	54	10	1200	7.8	0.02	5800
MVS0603B390K	39	10	25	31	67	1.0	30	0.3	0.003	100
MVS0805B390K	39	10	25	31	67	1.0	60	0.3	0.005	180
MVS1206B390K	39	10	25	31	65	1.0	200	1.0	0.008	650
MVS1210B390K	39	10	25	31	65	2.5	300	1.7	0.01	1000
MVS1812B390K	39	10	25	31	65	5.0	800	3.7	0.015	2500
MVS2220B390K	39	10	25	31	65	10	1200	9.6	0.02	4100
MVS0805B470K	47	10	30	38	77	1.0	60	0.3	0.005	150
MVS1206B470K	47	10	30	38	77	1.0	200	1.1	0.008	380
MVS1210B470K	47	10	30	38	77	2.5	300	2.0	0.01	900
MVS1812B470K	47	10	30	38	77	5.0	800	4.2	0.015	2000
MVS2220B470K	47	10	30	38	77	10	1200	12.0	0.02	3000
MVS1206B560K	56	10	35	45	90	1.0	100	0.4	0.008	300
MVS1210B560K	56	10	35	45	90	2.5	250	2.0	0.01	600
MVS1812B560K	56	10	35	45	90	5.0	500	4.0	0.015	1200
MVS2220B560K	56	10	35	45	90	10	1000	7.7	0.02	2000
MVS1206B680K	68	10	40	56	110	1.0	100	0.5	0.008	250
MVS1210B680K	68	10	40	56	110	2.5	250	2.3	0.01	450
MVS1812B680K	68	10	40	56	110	5.0	500	4.8	0.015	1000
MVS2220B680K	68	10	40	56	110	10	1000	9	0.02	1500
MVS1206B820K	82	10	50	65	135	1.0	100	0.6	0.008	180
MVS1210B820K	82	10	50	65	135	2.5	200	1.6	0.01	300
MVS1812B820K	82	10	50	65	135	5.0	400	4.5	0.015	600
MVS2220B820K	82	10	50	65	135	10	800	5.6	0.02	1000
MVS1206B101K	100	10	60	85	165	1.0	100	0.7	0.008	110
MVS1210B101K	100	10	60	85	165	2.5	200	2.0	0.01	160
MVS1812B101K	100	10	60	85	165	5.0	400	5.8	0.015	300
MVS2220B101K	100	10	60	85	165	10	800	6.8	0.02	600