Leaded Varistors *(Cont.)*

EPCOS

Maximum Allowable Voltage (V) AC	DC	Varistor Voltage @ 1mA ±10% (V)	Maximum Clamping Voltage V	A	$i_{Max.}$ 8/20 µs A	Dimensions (mm) LS ±1	A ±1	Ø Max.	T Max.	H Max.	ØD ±.05	Digi-Key Part No.	1	10	Pricing 100	1,000	5,000	Epcos Part No.
300	385	470	775	5.0	800	5.0	2.1	7.0	4.7	8.5	.6	495-1422-ND	9.76	84.33	702.30	4002.41	3735.66/M	S05K300E2
150	200	240	395	10	1750	5.0	1.8	9.0	4.1	11.0	.6	495-1424-ND	6.10	52.71	438.94	2501.51	2334.79/M	S07K150E2
250	320	390	650	10	1750	5.0	1.9	9.0	4.5	11.0	.6	495-1425-ND◆	6.10	52.71	438.94	2501.51	2334.79/M	S07K250E2
275	350	430	710	10	1750	5.0	2.0	9.0	4.6	11.0	.6	495-1426-ND	6.10	52.71	438.94	2501.51	2334.79/M	S07K275E2
300	385	470	775	10	1750	5.0	2.1	9.0	4.7	11.0	.6	495-1427-ND◆	6.10	52.71	438.94	2501.51	2334.79/M	S07K300E2
320	420	510	845	10	1750	5.0	2.3	9.0	4.6	11.0	.6	495-1428-ND	6.10	52.71	438.94	2501.51	2334.79/M	S07K320E2
140	180	220	360	25	3500	7.5	1.9	12.0	4.6	14.5	.8	495-1429-ND	7.90	67.76	564.40	3216.70	3002.29/M	S10K140E2
150	200	240	395	25	3500	7.5	2.0	12.0	4.7	14.5	.8	495-1430-ND	7.90	67.76	564.40	3216.70	3002.29/M	S10K150E2
175	225	270	455	25	3500	7.5	2.2	12.0	4.9	14.5	.8	495-1431-ND◆	7.90	67.76	564.40	3216.70	3002.29/M	S10K175E2
250	320	390	650	25	3500	7.5	2.1	12.0	5.2	14.5	.8	495-1432-ND	7.90	67.76	564.40	3216.70	3002.29/M	S10K250E2
275	350	430	710	25	3500	7.5	2.2	12.0	5.4	14.5	.8	495-1433-ND	7.90	67.76	564.40	3216.70	3002.29/M	S10K275E2
300	385	470	775	25	3500	7.5	2.3	12.0	5.6	14.5	.8	495-1434-ND	7.90	67.76	564.40	3216.70	3002.29/M	S10K300E2
420	560	680	1120	25	3500	7.5	3.5	12.0	7.4	15.0	.8	495-1435-ND	16.03	136.95	1141.10	6504.03	6070.42/M	S10K420E2
130	170	205	340	50	6000	7.5	1.9	15.5	4.6	18.5	.8	495-1436-ND	8.31	71.54	596.10	3397.96	3171.40/M	S14K130E2
140	180	220	360	50	6000	7.5	2.0	15.5	4.7	18.5	.8	495-1437-ND	8.31	71.54	596.10	3397.96	3171.40/M	S14K140E2
150	200	240	395	50	6000	7.5	2.1	15.5	4.8	18.5	.8	495-1438-ND	8.31	71.54	596.10	3397.96	3171.40/M	S14K150E2
175	225	270	455	50	6000	7.5	2.2	15.5	4.9	18.5	.8	495-1439-ND◆	8.31	71.54	596.10	3397.96	3171.40/M	S14K175E2
250	320	390	650	50	6000	7.5	2.1	15.5	5.2	18.5	.8	495-1440-ND	8.31	71.54	596.10	3397.96	3171.40/M	S14K250E2
275	350	430	710	50	6000	7.5	2.2	15.5	5.4	18.5	.8	495-1441-ND◆	8.31	71.54	596.10	3397.96	3171.40/M	S14K275E2
300	385	470	775	50	6000	7.5	2.3	15.5	5.6	18.5	.8	495-1442-ND◆	8.31	71.54	596.10	3397.96	3171.40/M	S14K300E2
130	170	205	340	100	10000	10.0	2.0	21.5	5.0	25.5	1.0	495-1443-ND◆	36.47	312.50	2604.04	14843.35	13853.73/M	S20K130E2
140	180	220	360	100	10000	10.0	2.1	21.5	5.1	25.5	1.0	495-1444-ND	22.17	189.95	1582.85	9022.43	8420.89/M	S20K140E2
150	200	240	395	100	10000	10.0	2.2	21.5	5.2	25.5	1.0	495-1445-ND	37.19	318.63	2655.10	15134.40	14125.37/M	S20K150E2
175	225	270	455	100	10000	10.0	2.3	21.5	5.3	25.5	1.0	495-1446-ND	35.04	300.24	2501.92	14261.26	13310.44/M	S20K175E2
250	320	390	650	100	10000	10.0	2.4	21.5	5.7	25.5	1.0	495-1447-ND◆	32.18	275.73	2297.68	13097.08	12223.88/M	S20K250E2
275	350	430	710	100	10000	10.0	2.6	21.5	5.8	25.5	1.0	495-1448-ND◆	30.75	263.48	2195.56	12514.98	11680.59/M	S20K275E2
300	385	470	775	100	10000	10.0	2.8	21.5	6.1	25.5	1.0	495-1449-ND◆	29.32	251.23	2093.44	11932.89	11137.31/M	S20K300E2
Automotive Series - Fig. 2																		
14	16	22	43	10	1000	7.5	1.5	17.0	5.0	20.5	.8	495-1450-ND◆	40.95	350.44	2920.26	16644.93	15535.24/M	S14K14AUTO
14	16	22	43	20	2000	10.0	1.6	23.0	5.4	27.5	1.0	495-1451-ND	162.51	1392.76	11605.00	66148.91	61739.00/M	S20K14AUTO

◆ ***RoHS Compliant***

TDK Multilayer Chip Varistors for Surge and Static Protection

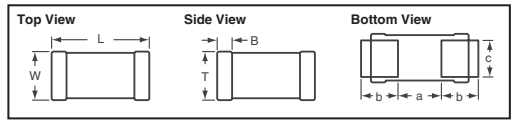
AVR and AVRL Series

Digi-Reel® RoHS COMPLIANT

Features: • No polarity due to symmetrical current-voltage characteristics • Excellent electrostatic absorption capability • Can replace a Zener diode and capacitor combination

Specifications: • Operating Temperature: -40°C ~ 125°C

Size Code	Dimensions – mm L	W	T	B (Min.)	a	b	c
0402	1.0	0.5	0.5	0.1	0.3 ~ 0.5	0.35 ~ 0.45	0.4 ~ 0.6
0603	1.6	0.8	0.8	0.2	0.6 ~ 0.8	0.6 ~ 0.8	0.6 ~ 0.8
0805	2.0	1.25	1.0	0.2	0.9 ~ 1.2	0.7 ~ 0.9	0.9 ~ 1.2



AVR Series

Size Code	Varistor Voltage (VDC@ 1mA)	Maximum Continuous Voltage (VDC)	Clamping Voltage (8/20µs)	Maximum Peak Current (A)	Capacitance (pF)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape and Reel Qty.	Pricing	TDK Part No.
0402	8	5.5	14 (1A)	25	650	445-2532-1-ND	.09	.81	6.17	445-2532-2-ND	10,000	31.95/M	AVR-M1005C080MTAAB
			15 (1A)	3	100	445-2533-1-ND	.09	.81	6.17	445-2533-2-ND	10,000	31.95/M	AVR-M1005C080MTABB
			19 (1A)	1	33	445-2559-1-ND	.09	.81	6.17	445-2559-2-ND	10,000	31.95/M	AVR-M1005C080MTACB
	12	7.5	20 (1A)	10	130	445-2534-1-ND	.09	.81	6.17	445-2534-2-ND	10,000	31.95/M	AVR-M1005C120MTAAB
	27	15	50 (1A)	4	40	445-2535-1-ND	.09	.81	6.17	445-2535-2-ND	10,000	31.95/M	AVR-M1005C270MTAAB
				1	15	445-2536-1-ND	.09	.81	6.17	—	—	—	AVR-M1005C270MTABB
0603	8	5.5	15 (2A)	30	650	445-2537-1-ND	.13	1.21	9.26	445-2537-2-ND	4,000	51.55/M	AVR-M1608C080MTAAB
	12	7.5	20 (2A)	50	1050	445-2538-1-ND	.13	1.21	9.26	445-2538-2-ND	4,000	51.55/M	AVR-M1608C120MT6AB
				15	400	445-2539-1-ND	.13	1.21	9.26	445-2539-2-ND	4,000	51.55/M	AVR-M1608C120MT2AB
	18	11	30 (2A)	30	600	445-2540-1-ND	.13	1.21	9.26	445-2540-2-ND	4,000	51.55/M	AVR-M1608C180MT6AB
	22	16	34 (2A)	30	560	445-2541-1-ND	.13	1.21	9.26	445-2541-2-ND	4,000	51.55/M	AVR-M1608C220KT6AB
			37 (2A)	10	210	445-2542-1-ND	.13	1.21	9.26	445-2542-2-ND	4,000	51.55/M	AVR-M1608C220KT2AB
	27	19	42 (2A)	48	430	445-2543-1-ND	.13	1.21	9.26	445-2543-2-ND	4,000	51.55/M	AVR-M1608C270KT6AB
				20	160	445-2544-1-ND	.13	1.21	9.26	445-2544-2-ND	4,000	51.55/M	AVR-M1608C270KT2AB
		17	52 (2A)	2	30	445-2545-1-ND	.13	1.21	9.26	445-2545-2-ND	4,000	51.55/M	AVR-M1608C270MTAAB
					15	445-2546-1-ND	.13	1.21	9.26	445-2546-2-ND	4,000	51.55/M	AVR-M1608C270MTABB
0805	12	7.5	20 (5A)	60	1000	445-2547-1-ND	.24	2.21	16.97	445-2547-2-ND	2,000	95.11/M	AVR-M2012C120MT6AB
	22	16	38 (5A)	100	800	445-2548-1-ND	.24	2.21	16.97	445-2548-2-ND	2,000	95.11/M	AVR-M2012C220KT6AB
	39	28	62 (5A)	100	430	445-2549-1-ND	.24	2.21	16.97	445-2549-2-ND	2,000	95.11/M	AVR-M2012C390KT6AB

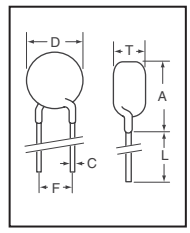
AVRL Series

Size Code	Typical Varistor Voltage (VDC @ 1mA)	Maximum Continuous Voltage (VDC)	Capacitance (pF)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape and Reel Qty.	Pricing	TDK Part No.
0402	90	10	1.1	445-2560-1-ND	.13	1.21	9.26	445-2560-2-ND	10,000	47.92/M	AVRL101A1R1NTA
	39	10	1.1	445-2561-1-ND	.13	1.21	9.26	445-2561-2-ND	10,000	47.92/M	AVRL101A1R1NTB
	27	10	3.3	445-2562-1-ND	.13	1.21	9.26	445-2562-2-ND	10,000	47.92/M	AVRL101A3R3FTA
			6.8	445-2563-1-ND	.13	1.21	9.26	—	—	—	AVRL101A6R8GTA
0603	90	10	1.1	445-2564-1-ND	.17	1.60	12.35	445-2564-2-ND	4,000	68.97/M	AVRL161A1R1NTA
	39	10	1.1	445-2565-1-ND	.17	1.60	12.35	445-2565-2-ND	4,000	68.97/M	AVRL161A1R1NTB
	27	10	3.3	445-2566-1-ND	.17	1.60	12.35	445-2566-2-ND	4,000	68.97/M	AVRL161A3R3FTA

VISHAY BCcomponents

Leaded Varistors

The varistors consist of a disc of low-B ceramic material with two tinned solid copper leads. They are coated with a layer of ochre colored epoxy, which provides electrical, mechanical and climatic protection. The encapsulation is resistant to all cleaning solvents in accordance with "IEC 60068-2-45".



Size Code	Maximum Continuous Volt. AC (V)	DC (V)	Varistor Voltage @ 1mA (V)	Maximum Voltage Stated Current V (V)	I. (A)	Dimensions – mm D Max.	A Max.	L Min.	T Max.	T Min.	C	F	Digi-Key Part No.	Price Each 1	10	100	Vishay Part No.
C	230	300	360	600	25.0	13.5	15.5	17.0	7.0	4.4	0.8 ±0.05	7.5 ±0.8	BC1431-ND	.33	.29	.24	2322 594 52316
D	140	180	220	370	50.0	17.0	19.0	16.0	7.0	4.4	0.8 ±0.05	7.5 ±0.8	BC1449-ND	.43	.37	.31	2322 595 51416
	320	420	510	850	50.0	17.0	19.0	16.0	7.0	4.4	0.8 ±0.05	7.5 ±0.8	BC1456-ND	.43	.37	.31	2322 595 53216

Digi-Reel® **Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.**

Free shipping on orders over £50! All prices are in British pound sterling and include duties.

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