

EMC Components

AVR-S Series

Varistors Countermeasure for Surge and Static Electricity LEAD

FEATURES

- These varistors have a large nonlinear voltage coefficient (α) and superior surge absorption performance. Asymmetrical degradation is particularly small.
- Low maximum clamping voltage. Provides superior protection.
- These small varistors are able to absorb high-energy surges.
- Outstandingly short response times to sharp surge peaks.
- Symmetric V-I curve characteristics. Even after surge absorption, little loss of symmetry.
- May be used over a wide temperature range due to excellent thermal characteristics.

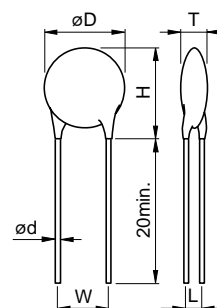


VARISTOR VOLTAGE: 22 TO 47V [Operating temperature range: -40 to +125°C]

AVR-S05D TYPE

SHAPES AND DIMENSIONS

Part No.	Dimensions in mm					
	D max.	T max.	W	H max.	L	d
AVR-S05D220K	7	4.5	5±1	10	1.6±1	0.6±0.1
AVR-S05D270K	7	4.7	5±1	10	1.9±1	0.6±0.1
AVR-S05D330K	7	4.3	5±1	10	1.5±1	0.6±0.1
AVR-S05D390K	7	4.5	5±1	10	1.7±1	0.6±0.1
AVR-S05D470K	7	4.7	5±1	10	1.9±1	0.6±0.1



ELECTRICAL CHARACTERISTICS

Part No.	Varistor voltage $V_{(0.1mA)}$	Maximum circuit voltage $E_{dc}(V)$	Maximum voltage $V_{(1A)}$	Short duration applied voltage $E_{dc}(V)$ [5min]	Maximum non-repetitive energy (J)[20ms]	Maximum repetitive energy (J) [2ms/10 ⁴ times]	Maximum non-repetitive transient current (A)	
							1 time*1	2 times*2
AVR-S05D220K	22[20 to 24]	16	48	24	2.5	0.6	100	50
AVR-S05D270K	27[24 to 30]	19	60	29	2.5	0.6	100	50
AVR-S05D330K	33[30 to 36]	24	73	36	2.5	0.6	100	50
AVR-S05D390K	39[35 to 43]	28	86	42	2.5	0.6	100	50
AVR-S05D470K	47[42 to 52]	34	104	50	2.5	0.6	100	50

*1 for abroad *2 in Japan

AVR-S07D TYPE

SHAPES AND DIMENSIONS

Part No.	Dimensions in mm					
	D max.	T max.	W	H max.	L	d
AVR-S07D220K	9	4.8	5±1	12	1.6±1	0.6±0.1
AVR-S07D270K	9	5	5±1	12	1.9±1	0.6±0.1
AVR-S07D330K	9	4.6	5±1	12	1.5±1	0.6±0.1
AVR-S07D390K	9	4.8	5±1	12	1.7±1	0.6±0.1
AVR-S07D470K	9	5	5±1	12	1.9±1	0.6±0.1

ELECTRICAL CHARACTERISTICS

Part No.	Varistor voltage $V_{(1mA)}$	Maximum circuit voltage $E_{dc}(V)$	Maximum voltage $V_{(2.5A)}$	Short duration applied voltage $E_{dc}(V)$ [5min]	Maximum non-repetitive energy (J)[20ms]	Maximum repetitive energy (J) [2ms/10 ⁴ times]	Maximum non-repetitive transient current (A)	
							1 time*1	2 times*2
AVR-S07D220K	22[20 to 24]	16	43	24	5	1.2	250	125
AVR-S07D270K	27[24 to 30]	19	53	29	5	1.2	250	125
AVR-S07D330K	33[30 to 36]	24	65	36	5	1.2	250	125
AVR-S07D390K	39[35 to 43]	28	77	42	5	1.2	250	125
AVR-S07D470K	47[42 to 52]	34	93	50	5	1.2	250	125

*1 for abroad *2 in Japan

EMC Components

AVR-S Series

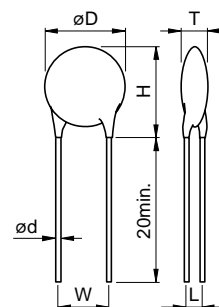
Varistors Countermeasure for Surge and Static Electricity
LEAD

VARISTOR VOLTAGE: 22 TO 47V[Operating temperature range: -40 to +125°C]

AVR-S10D TYPE

SHAPES AND DIMENSIONS

Part No.	D max.	T max.	W	H max.	L	Dimensions in mm	
						d	
AVR-S10D220K	12.5	5.2	7.5±1	15.5	1.8±1	0.8±0.1	
AVR-S10D270K	12.5	5.4	7.5±1	15.5	2±1	0.8±0.1	
AVR-S10D330K	12.5	5.6	7.5±1	15.5	2.3±1	0.8±0.1	
AVR-S10D390K	12.5	5.9	7.5±1	15.5	2.6±1	0.8±0.1	
AVR-S10D470K	12.5	6.2	7.5±1	15.5	2.9±1	0.8±0.1	



ELECTRICAL CHARACTERISTICS

Part No.	Varistor voltage V _(1mA)	Maximum circuit voltage E _{dc} (V)	Maximum voltage V _(5A)	Short duration applied voltage E _{dc} (V) [5min]	Maximum non-repetitive energy (J)[20ms]	Maximum repetitive energy (J) [2ms/10 ⁴ times]	Maximum non-repetitive transient current (A)	
							1 time* ¹	2 times* ²
AVR-S10D220K	22[20 to 24]	16	43	24	10	2.5	500	250
AVR-S10D270K	27[24 to 30]	19	53	29	10	2.5	500	250
AVR-S10D330K	33[30 to 36]	24	65	36	10	2.5	500	250
AVR-S10D390K	39[35 to 43]	28	77	42	10	2.5	500	250
AVR-S10D470K	47[42 to 52]	34	93	50	10	2.5	500	250

*1 for abroad *2 in Japan

AVR-S14D TYPE

SHAPES AND DIMENSIONS

Part No.	D max.	T max.	W	H max.	L	Dimensions in mm	
						d	
AVR-S14D220K	16	5.2	7.5±1	19	1.8±1	0.8±0.1	
AVR-S14D270K	16	5.4	7.5±1	19	2±1	0.8±0.1	
AVR-S14D330K	16	5.6	7.5±1	19	2.3±1	0.8±0.1	
AVR-S14D390K	16	5.9	7.5±1	19	2.6±1	0.8±0.1	
AVR-S14D470K	16	6.2	7.5±1	19	2.9±1	0.8±0.1	

ELECTRICAL CHARACTERISTICS

Part No.	Varistor voltage V _(1mA)	Maximum circuit voltage E _{dc} (V)	Maximum voltage V _(10A)	Short duration applied voltage E _{dc} (V) [5min]	Maximum non-repetitive energy (J)[20ms]	Maximum repetitive energy (J) [2ms/10 ⁴ times]	Maximum non-repetitive transient current (A)	
							1 time* ¹	2 times* ²
AVR-S14D220K	22[20 to 24]	16	43	24	20	5	1000	500
AVR-S14D270K	27[24 to 30]	19	53	29	20	5	1000	500
AVR-S14D330K	33[30 to 36]	24	65	36	20	5	1000	500
AVR-S14D390K	39[35 to 43]	28	77	42	20	5	1000	500
AVR-S14D470K	47[42 to 52]	34	93	50	20	5	1000	500

*1 for abroad *2 in Japan

AVR-20D TYPE

SHAPES AND DIMENSIONS

Part No.	D max.	T max.	W	H max.	L	Dimensions in mm	
						d	
AVR-S20D220K	21.5	5.6	10±1	24.5	2±1	1±0.1	
AVR-S20D270K	21.5	5.8	10±1	24.5	2.2±1	1±0.1	
AVR-S20D330K	21.5	6	10±1	24.5	2.5±1	1±0.1	
AVR-S20D390K	21.5	6.3	10±1	24.5	2.8±1	1±0.1	
AVR-S20D470K	21.5	6.6	10±1	24.5	3.1±1	1±0.1	

ELECTRICAL CHARACTERISTICS

Part No.	Varistor voltage V _(1mA)	Maximum circuit voltage E _{dc} (V)	Maximum voltage V _(20A)	Short duration applied voltage E _{dc} (V) [5min]	Maximum non-repetitive energy (J)[20ms]	Maximum repetitive energy (J) [2ms/10 ⁴ times]	Maximum non-repetitive transient current (A)	
							1 time* ¹	2 times* ²
AVR-S20D220K	22[20 to 24]	16	43	24	40	10	2000	1000
AVR-S20D270K	27[24 to 30]	19	53	29	40	10	2000	1000
AVR-S20D330K	33[30 to 36]	24	65	36	40	10	2000	1000
AVR-S20D390K	39[35 to 43]	28	77	42	40	10	2000	1000
AVR-S20D470K	47[42 to 52]	34	93	50	40	10	2000	1000

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EMC Components

AVR-S Series

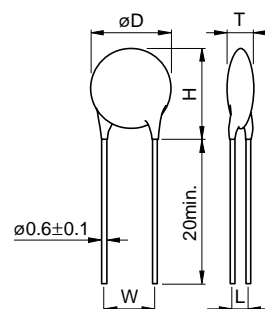
Varistors Countermeasure for Surge and Static Electricity
LEAD

VARISTOR VOLTAGE: 56 TO 470V [Operating temperature range: -40 to +85°C]

AVR-S05D TYPE

SHAPES AND DIMENSIONS

Part No.	D max.	T max.	W	H max.	Dimensions in mm	
					L	
AVR-S05D560K	7	4.7	5±1	10	1.8±1	
AVR-S05D680K	7	5	5±1	10	2.1±1	
AVR-S05D820K	7	4.3	5±1	10	1.4±1	
AVR-S05D101K	7	4.6	5±1	10	1.6±1	
AVR-S05D121K	7	4.8	5±1	10	1.8±1	
AVR-S05D201K	7	4.8	5±1	10	2±1	
AVR-S05D221K	7	4.9	5±1	10	2.1±1	
AVR-S05D241K	7	5.1	5±1	10	2.3±1	
AVR-S05D271K	7	5.3	5±1	10	2.5±1	
AVR-S05D331K	7	5.3	5±1	10	2.5±1	
AVR-S05D361K	7	5.5	5±1	10	2.7±1	
AVR-S05D391K	7	5.7	5±1	10	2.9±1	
AVR-S05D431K	7	5.9	5±1	10	3.1±1	
AVR-S05D471K	7	6.1	5±1	10	3.3±1	



ELECTRICAL CHARACTERISTICS

Part No.	Varistor voltage V _(0.1mA)	Maximum circuit voltage		Maximum voltage V _(1A)	Rated pulse power (W)	Maximum non-repetitive energy (J)[2ms]	Maximum non-repetitive transient current (A)	
		Erms(V)	E _{dc} (V)				1 time*1	2 times*2
AVR-S05D560K	56 [50 to 62]	35	45	123	0.01	1	100	50
AVR-S05D680K	68 [61 to 75]	40	56	150	0.01	1.2	100	50

Part No.	Varistor voltage V _(0.1mA)	Maximum circuit voltage		Maximum voltage V _(5A)	Rated pulse power (W)	Maximum non-repetitive energy (J)[2ms]	Maximum non-repetitive transient current (A)	
		Erms(V)	E _{dc} (V)				1 time*1	2 times*2
AVR-S05D820K	82 [74 to 90]	50	65	145	0.1	1.7	400	200
AVR-S05D101K	100 [90 to 110]	60	85	175	0.1	2	400	200
AVR-S05D121K	120 [108 to 132]	75	100	210	0.1	2.5	400	200
AVR-S05D201K	200 [185 to 225]	130	170	355	0.1	4	400	200
AVR-S05D221K	220 [198 to 242]	140	180	380	0.1	4.5	400	200
AVR-S05D241K	240 [216 to 264]	150	200	415	0.1	5	400	200
AVR-S05D271K	270 [247 to 303]	175	225	475	0.1	6	400	200
AVR-S05D331K	330 [297 to 363]	210	270	600	0.1	7	400	200
AVR-S05D361K	360 [324 to 396]	230	300	620	0.1	7.5	400	200
AVR-S05D391K	390 [351 to 429]	250	320	675	0.1	8	400	200
AVR-S05D431K	430 [387 to 473]	275	350	745	0.1	9	400	200
AVR-S05D471K	470 [423 to 517]	300	385	810	0.1	10	400	200

*1 for abroad *2 in Japan

EMC Components

AVR-S Series

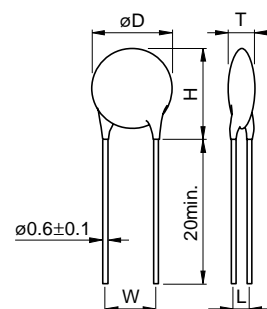
Varistors Countermeasure for Surge and Static Electricity
LEAD

VARISTOR VOLTAGE: 56 TO 510V [Operating temperature range: -40 to +85°C]

AVR-S07D TYPE

SHAPES AND DIMENSIONS

Part No.	D max.	T max.	W	H max.	Dimensions in mm	
					L	
AVR-S07D560K	9	4.9	5±1	12	1.8±1	
AVR-S07D680K	9	5.2	5±1	12	2.1±1	
AVR-S07D820K	9	4.5	5±1	12	1.4±1	
AVR-S07D101K	9	4.7	5±1	12	1.6±1	
AVR-S07D121K	9	4.9	5±1	12	1.8±1	
AVR-S07D201K	9	5	5±1	12	1.9±1	
AVR-S07D221K	9	5.1	5±1	12	2±1	
AVR-S07D241K	9	5.3	5±1	12	2.2±1	
AVR-S07D271K	9	5.5	5±1	12	2.4±1	
AVR-S07D331K	9	5.5	5±1	12	2.4±1	
AVR-S07D361K	9	5.7	5±1	12	2.6±1	
AVR-S07D391K	9	5.9	5±1	12	2.8±1	
AVR-S07D431K	9	6.1	5±1	12	3±1	
AVR-S07D471K	9	6.3	5±1	12	3.2±1	
AVR-S07D511K	9	6.5	5±1	12	3.4±1	



ELECTRICAL CHARACTERISTICS

Part No.	Varistor voltage V _(1mA)	Maximum circuit voltage			Rated pulse power (W)	Maximum non-repetitive energy (J)[2ms]	Maximum non-repetitive transient current (A)	
		Erms(V)	E _{dc} (V)	Maximum voltage V _(2.5A)			1 time*1	2 times*2
AVR-S07D560K	56 [50 to 62]	35	45	110	0.02	2.2	250	125
AVR-S07D680K	68 [61 to 75]	40	56	135	0.02	2.5	250	125

Part No.	Varistor voltage V _(1mA)	Maximum circuit voltage			Rated pulse power (W)	Maximum non-repetitive energy (J)[2ms]	Maximum non-repetitive transient current (A)	
		Erms(V)	E _{dc} (V)	Maximum voltage V _(10A)			1 time*1	2 times*2
AVR-S07D820K	82 [74 to 90]	50	65	135	0.25	3.5	1200	600
AVR-S07D101K	100 [90 to 110]	60	85	165	0.25	4	1200	600
AVR-S07D121K	120 [108 to 132]	75	100	200	0.25	5	1200	600
AVR-S07D201K	200 [185 to 225]	130	170	340	0.25	10	1200	600
AVR-S07D221K	220 [198 to 242]	140	180	360	0.25	10	1200	600
AVR-S07D241K	240 [216 to 264]	150	200	395	0.25	10	1200	600
AVR-S07D271K	270 [247 to 303]	175	225	455	0.25	12	1200	600
AVR-S07D331K	330 [297 to 363]	210	270	550	0.25	15	1200	600
AVR-S07D361K	360 [324 to 396]	230	300	595	0.25	15	1200	600
AVR-S07D391K	390 [351 to 429]	250	320	650	0.25	17	1200	600
AVR-S07D431K	430 [387 to 473]	275	350	710	0.25	20	1200	600
AVR-S07D471K	470 [423 to 517]	300	385	775	0.25	20	1200	600
AVR-S07D511K	510 [459 to 561]	320	410	845	0.25	20	1200	600

*1 for abroad *2 in Japan

EMC Components

AVR-S Series

Varistors Countermeasure for Surge and Static Electricity

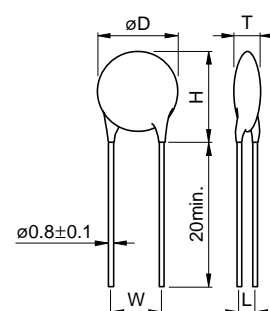
LEAD

VARISTOR VOLTAGE: 56 TO 620V [Operating temperature range: -40 to +85°C]

AVR-S10D TYPE

SHAPES AND DIMENSIONS

Part No.	D max.	T max.	W	H max.	Dimensions in mm	
					L	
AVR-S10D560K	12.5	5.4	7.5±1	15.5	2.1±1	
AVR-S10D680K	12.5	5.7	7.5±1	15.5	2.4±1	
AVR-S10D820K	12.5	5	7.5±1	15.5	1.6±1	
AVR-S10D101K	12.5	5.1	7.5±1	15.5	1.8±1	
AVR-S10D121K	12.5	5.3	7.5±1	15.5	2±1	
AVR-S10D201K	12.5	5.4	7.5±1	15.5	2.1±1	
AVR-S10D221K	12.5	5.5	7.5±1	15.5	2.2±1	
AVR-S10D241K	12.5	5.7	7.5±1	15.5	2.4±1	
AVR-S10D271K	12.5	5.9	7.5±1	15.5	2.6±1	
AVR-S10D331K	12.5	5.9	7.5±1	15.5	2.6±1	
AVR-S10D361K	12.5	6.1	7.5±1	15.5	2.8±1	
AVR-S10D391K	12.5	6.3	7.5±1	15.5	3±1	
AVR-S10D431K	12.5	6.5	7.5±1	15.5	3.2±1	
AVR-S10D471K	12.5	6.7	7.5±1	15.5	3.4±1	
AVR-S10D511K	12.5	7.4	7.5±1	16.5	3.6±1	
AVR-S10D621K	12.5	8	7.5±1	16.5	4.2±1	



ELECTRICAL CHARACTERISTICS

Part No.	Varistor voltage V _(1mA)	Maximum circuit voltage		Maximum voltage V _(5A)	Rated pulse power (W)	Maximum non-repetitive energy (J)[2ms]	Maximum non-repetitive transient current (A)	
		Erms(V)	E _{dc} (V)				1 time*1	2 times*2
AVR-S10D560K	56 [50 to 62]	35	45	110	0.05	5.5	500	250
AVR-S10D680K	68 [61 to 75]	40	56	135	0.05	6.5	500	250

Part No.	Varistor voltage V _(1mA)	Maximum circuit voltage		Maximum voltage V _(25A)	Rated pulse power (W)	Maximum non-repetitive energy (J)[2ms]	Maximum non-repetitive transient current (A)	
		Erms(V)	E _{dc} (V)				1 time*1	2 times*2
AVR-S10D820K	82 [74 to 90]	50	65	135	0.4	8	2500	1250
AVR-S10D101K	100 [90 to 110]	60	85	165	0.4	10	2500	1250
AVR-S10D121K	120 [108 to 132]	75	100	200	0.4	12	2500	1250
AVR-S10D201K	200 [185 to 225]	130	170	340	0.4	20	2500	1250
AVR-S10D221K	220 [198 to 242]	140	180	360	0.4	23	2500	1250
AVR-S10D241K	240 [216 to 264]	150	200	395	0.4	25	2500	1250
AVR-S10D271K	270 [247 to 303]	175	225	455	0.4	30	2500	1250
AVR-S10D331K	330 [297 to 363]	210	270	550	0.4	35	2500	1250
AVR-S10D361K	360 [324 to 396]	230	300	595	0.4	35	2500	1250
AVR-S10D391K	390 [351 to 429]	250	320	650	0.4	40	2500	1250
AVR-S10D431K	430 [387 to 473]	275	350	710	0.4	45	2500	1250
AVR-S10D471K	470 [423 to 517]	300	385	775	0.4	45	2500	1250
AVR-S10D511K	510 [459 to 561]	320	410	845	0.4	45	2500	1250
AVR-S10D621K	620 [558 to 682]	385	505	1025	0.4	45	2500	1250

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EMC Components

AVR-S Series

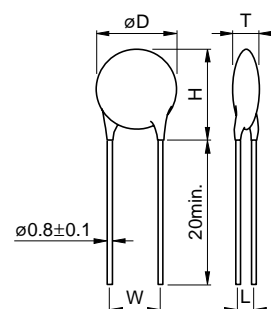
Varistors Countermeasure for Surge and Static Electricity
LEAD

VARISTOR VOLTAGE: 56 TO 620V [Operating temperature range: -40 to +85°C]

AVR-S14D TYPE

SHAPES AND DIMENSIONS

Part No.	D max.	T max.	W	H max.	Dimensions in mm	
					L	
AVR-S14D560K	16	5.4	7.5±1	19	2.1±1	
AVR-S14D680K	16	5.7	7.5±1	19	2.4±1	
AVR-S14D820K	16	5	7.5±1	19	1.6±1	
AVR-S14D141K	16	5.1	7.5±1	19	1.8±1	
AVR-S14D121K	16	5.2	7.5±1	19	2±1	
AVR-S14D201K	16	5.4	7.5±1	19	2.1±1	
AVR-S14D221K	16	5.5	7.5±1	19	2.2±1	
AVR-S14D241K	16	5.7	7.5±1	19	2.4±1	
AVR-S14D271K	16	5.9	7.5±1	19	2.6±1	
AVR-S14D331K	16	5.9	7.5±1	19	2.6±1	
AVR-S14D361K	16	6.1	7.5±1	19	2.8±1	
AVR-S14D391K	16	6.3	7.5±1	19	3±1	
AVR-S14D431K	16	6.5	7.5±1	19	3.2±1	
AVR-S14D471K	16	6.7	7.5±1	19	3.4±1	
AVR-S14D511K	16	7.4	7.5±1	20	3.6±1	
AVR-S14D621K	16	8	7.5±1	20	4.2±1	



ELECTRICAL CHARACTERISTICS

Part No.	Varistor voltage V _(1mA)	Maximum circuit voltage		Maximum voltage V _(10A)	Rated pulse power (W)	Maximum non-repetitive energy (J)[2ms]	Maximum non-repetitive transient current (A)	
		Erms(V)	E _{dc} (V)				1 time*1	2 times*2
AVR-S14D560K	56 [50 to 62]	35	45	110	0.1	10	1000	500
AVR-S14D680K	68 [61 to 75]	40	56	135	0.1	12	1000	500

Part No.	Varistor voltage V _(1mA)	Maximum circuit voltage		Maximum voltage V _(50A)	Rated pulse power (W)	Maximum non-repetitive energy (J)[2ms]	Maximum non-repetitive transient current (A)	
		Erms(V)	E _{dc} (V)				1 time*1	2 times*2
AVR-S14D820K	82 [74 to 90]	50	65	135	0.6	14	4500	2500
AVR-S14D141K	100 [90 to 110]	60	85	165	0.6	18	4500	2500
AVR-S14D121K	120 [108 to 132]	75	100	200	0.6	20	4500	2500
AVR-S14D201K	200 [185 to 225]	130	170	340	0.6	35	4500	2500
AVR-S14D221K	220 [198 to 242]	140	180	360	0.6	40	4500	2500
AVR-S14D241K	240 [216 to 264]	150	200	395	0.6	40	4500	2500
AVR-S14D271K	270 [247 to 303]	175	225	455	0.6	50	4500	2500
AVR-S14D331K	330 [297 to 363]	210	270	550	0.6	60	4500	2500
AVR-S14D361K	360 [324 to 396]	230	300	595	0.6	65	4500	2500
AVR-S14D391K	390 [351 to 429]	250	320	650	0.6	70	4500	2500
AVR-S14D431K	430 [387 to 473]	275	350	710	0.6	75	4500	2500
AVR-S14D471K	470 [423 to 517]	300	385	775	0.6	80	4500	2500
AVR-S14D511K	510 [459 to 561]	320	410	845	0.6	85	4500	2500
AVR-S14D621K	620 [558 to 682]	385	505	1025	0.6	85	4500	2500

*1 for abroad *2 in Japan

EMC Components

AVR-S Series

Varistors Countermeasure for Surge and Static Electricity

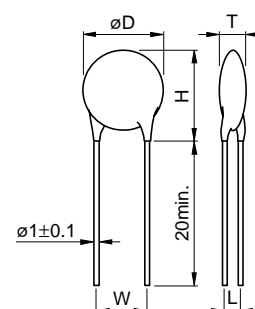
LEAD

VARISTOR VOLTAGE: 56 TO 620V [Operating temperature range: -40 to +85°C]

AVR-S20D TYPE

SHAPES AND DIMENSIONS

Part No.	D max.	T max.	W	H max.	Dimensions in mm	
					L	L
AVR-S20D560K	21.5	5.8	10±1	24.5	2.2±1	
AVR-S20D680K	21.5	6.1	10±1	24.5	2.5±1	
AVR-S20D820K	21.5	6.4	10±1	24.5	2.9±1	
AVR-S20D101K	21.5	5.5	10±1	24.5	2±1	
AVR-S20D121K	21.5	5.7	10±1	24.5	2.2±1	
AVR-S20D201K	21.5	5.8	10±1	24.5	2.3±1	
AVR-S20D221K	21.5	5.9	10±1	24.5	2.4±1	
AVR-S20D241K	21.5	6.1	10±1	24.5	2.6±1	
AVR-S20D271K	21.5	6.3	10±1	24.5	2.8±1	
AVR-S20D331K	21.5	6.3	10±1	24.5	2.8±1	
AVR-S20D361K	21.5	6.5	10±1	24.5	3±1	
AVR-S20D391K	21.5	6.7	10±1	24.5	3.2±1	
AVR-S20D431K	21.5	6.9	10±1	24.5	3.4±1	
AVR-S20D471K	21.5	7.1	10±1	24.5	3.6±1	
AVR-S20D511K	21.5	7.8	10±1	26.5	3.8±1	
AVR-S20D621K	21.5	8.4	10±1	26.5	4.4±1	



ELECTRICAL CHARACTERISTICS

Part No.	Varistor voltage V _(1mA)	Maximum circuit voltage		Maximum voltage V _(20A)	Rated pulse power (W)	Maximum non-repetitive energy (J)[2ms]	Maximum non-repetitive transient current (A)	
		Erms(V)	Edc(V)				1 time*1	2 times*2
AVR-S20D560K	56 [50 to 62]	35	45	110	0.2	35	2000	1000
AVR-S20D680K	68 [61 to 75]	40	56	135	0.2	40	2000	1000

Part No.	Varistor voltage V _(1mA)	Maximum circuit voltage		Maximum voltage V _(100A)	Rated pulse power (W)	Maximum non-repetitive energy (J)[2ms]	Maximum non-repetitive transient current (A)	
		Erms(V)	Edc(V)				1 time*1	2 times*2
AVR-S20D820K	82 [74 to 90]	50	65	135	1	27	6500	4000
AVR-S20D101K	100 [90 to 110]	60	85	165	1	30	6500	4000
AVR-S20D121K	120 [108 to 132]	75	100	200	1	40	6500	4000
AVR-S20D201K	200 [185 to 225]	130	170	340	1	70	6500	4000
AVR-S20D221K	220 [198 to 242]	140	180	360	1	75	6500	4000
AVR-S20D241K	240 [216 to 264]	150	200	395	1	80	6500	4000
AVR-S20D271K	270 [247 to 303]	175	225	455	1	90	6500	4000
AVR-S20D331K	330 [297 to 363]	210	270	550	1	110	6500	4000
AVR-S20D361K	360 [324 to 396]	230	300	595	1	120	6500	4000
AVR-S20D391K	390 [351 to 429]	250	320	650	1	130	6500	4000
AVR-S20D431K	430 [387 to 473]	275	350	710	1	140	6500	4000
AVR-S20D471K	470 [423 to 517]	300	385	775	1	150	6500	4000
AVR-S20D511K	510 [459 to 561]	320	410	845	1	150	6500	4000
AVR-S20D621K	620 [558 to 682]	385	505	1025	1	150	6500	4000

*1 for abroad *2 in Japan