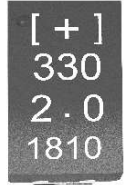


A2 series

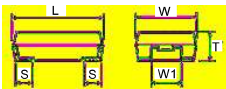
- Endurance: 2,000 hours at 105°C
- Low ESR
- Recommended Applications: System Board, Display Card, Small Charger and intelligent TV
- **RoHS Compliant and lead-free**



SPECIFICATIONS

Items	Characteristics	
Category Temperature Range	-55~+105°C	
Rated Working Voltage Range	2~25 V _{dc}	
Nominal Capacitance Range	6.8~470μF	
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)	
DC Leakage Current	I≤0.1CV W.V.: 2V~25V Where, I: Leakage current (μA), C: Nominal capacitance (μF), V: Rated voltage (V) (at 20°C after 2 minutes)	
Dissipation Factor (tanδ)	Rated Voltage(V _{dc})	2 2.5 4 6.3 7.5 10 12.5 16 25
	tanδ (max.)	0.06 0.10 (at 20°C, 120Hz)
ESR(100k~300kHz, 20°C)	Value in characteristics table	
Temperature Characteristic (Impedance Ratio at 100kHz)	Z(+105°C)/Z(+20°C)≤1.25 Z(-55°C)/Z(+20°C)≤1.25	
Endurance	After applying rated voltage with rated ripple current for 2,000 hours at 105°C, the capacitors shall meet the following requirements.	
	Appearance	No significant damage
	Capacitance Change	≤±20% of the initial value
	D.F. (tanδ)	≤150% of the initial specified value
	Leakage Current	≤The initial specified value
Humidity Test	After subjecting to 90%~95% RH for 500 hours at 60°C(no voltage), the capacitors shall meet the requirement as Endurance.	
	Rated Voltage(V _{dc})	2~2.5 4 6.3~7.5 8~16 25
	Capacitance Change	+70,-20% +60,-20% +50,-20% +40,-20%
	D.F. (tanδ)	≤200% of the initial specified value
	Leakage Current	≤The initial specified value
Surge Test	After subjecting to 1,000 cycles each consisting of charge with the surge voltage specified at normal temperature for 30 seconds through a protective resistor and discharge for 5 minutes 30 seconds, the capacitors shall meet the following requirements.	
	Appearance	No significant damage
	Capacitance Change	≤±20% of the initial value
	D.F. (tanδ)	≤150% of the initial specified value
	Leakage Current	≤The initial specified value

DIMENSIONS[mm]

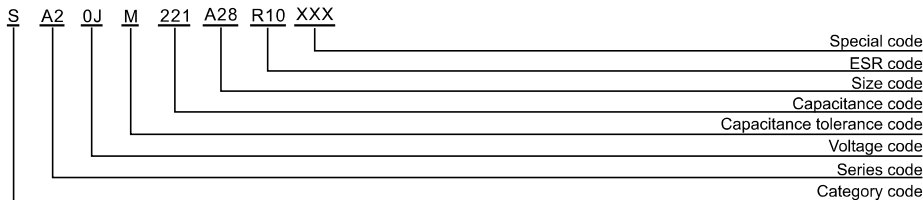


Case Size	L±0.3(mm)	W±0.2(mm)	T±0.1(mm)	W1±0.2(mm)	S±0.2(mm)
7.3x4.3x2.8	7.3	4.3	2.8	2.4	1.3

MARKING



PART NUMBERING SYSTEM



A2 series

■ STANDARD RATINGS

VDC (SV)	Cap (μF)	Size (LxWxT mm)	ESR (mΩ, 20°C, 100kHz) (max.)	Rated ripple current (100kHz, 20~105°C)(mA rms)	Leakage Current (20°C) (μA max.)	Part Number
2 (2.3)	100	7.3×4.3×2.8	16	2000	20	SA20BM101A28R16XXX
	150	7.3×4.3×2.8	9	3000	30	SA20BM151A28R09XXX
	220	7.3×4.3×2.8	9	3000	44	SA20BM221A28R09XXX
	270	7.3×4.3×2.8	9	3500	54	SA20BM271A28R09XXX
	330	7.3×4.3×2.8	9	3500	66	SA20BM331A28R09XXX
	470	7.3×4.3×2.8	9	3500	94	SA20BM471A28R09XXX
2.5 (2.5)	100	7.3×4.3×2.8	16	2000	25	SA20EM101A28R16XXX
	150	7.3×4.3×2.8	9	3000	37.5	SA20EM151A28R09XXX
	180	7.3×4.3×2.8	12	2500	45	SA20EM181A28R12XXX
	220	7.3×4.3×2.8	9	3000	55	SA20EM221A28R09XXX
	270	7.3×4.3×2.8	9	3500	67.5	SA20EM271A28R09XXX
	330	7.3×4.3×2.8	7	3500	82.5	SA20EM331A28R07XXX
		7.3×4.3×2.8	9	3500	82.5	SA20EM331A28R09XXX
	470	7.3×4.3×2.8	4.5	3500	117.5	SA20EM471A28R04XXX
		7.3×4.3×2.8	6	3500	117.5	SA20EM471A28R06XXX
7.3×4.3×2.8		9	3500	117.5	SA20EM471A28R09XXX	
4 (4.6)	68	7.3×4.3×2.8	20	1900	27.2	SA20GM680A28R20XXX
	82	7.3×4.3×2.8	16	2100	32.8	SA20GM820A28R16XXX
	150	7.3×4.3×2.8	18	2100	60	SA20GM151A28R18XXX
6.3 (7.2)	10	7.3×4.3×2.8	55	1000	6.3	SA20JM100A28R55XXX
	22	7.3×4.3×2.8	45	1000	13.9	SA20JM220A28R45XXX
	33	7.3×4.3×2.8	25	1800	20.8	SA20JM330A28R25XXX
	47	7.3×4.3×2.8	25	1800	29.6	SA20JM470A28R25XXX
	68	7.3×4.3×2.8	15	2000	42.8	SA20JM680A28R15XXX
	100	7.3×4.3×2.8	15	2000	63	SA20JM101A28R15XXX
		7.3×4.3×2.8	10	3000	94.5	SA20JM151A28R10XXX
	150	7.3×4.3×2.8	15	3000	94.5	SA20JM151A28R15XXX
		7.3×4.3×2.8	10	3000	138.6	SA20JM221A28R10XXX
	220	7.3×4.3×2.8	15	3000	138.6	SA20JM221A28R15XXX
7.3×4.3×2.8		15	3000	138.6	SA20JM221A28R15XXX	
7.5 (8.6)	150	7.3×4.3×2.8	10	3000	112.5	SA20AM151A28R10XXX
	200	7.3×4.3×2.8	12	3000	150	SA20AM201A28R12XXX
10 (11.5)	10	7.3×4.3×2.8	55	1000	10	SA21AM100A28R55XXX
	22	7.3×4.3×2.8	28	1600	22	SA21AM220A28R28XXX
	33	7.3×4.3×2.8	25	1800	33	SA21AM330A28R25XXX
	68	7.3×4.3×2.8	15	2000	68	SA21AM680A28R15XXX
	100	7.3×4.3×2.8	15	2500	100	SA21AM101A28R15XXX
12.5 (14.4)	10	7.3×4.3×2.8	55	1000	12.5	SA21TM100A28R55XXX
	15	7.3×4.3×2.8	45	1000	18.8	SA21TM150A28R45XXX
	22	7.3×4.3×2.8	30	1600	27.5	SA21TM220A28R30XXX
	33	7.3×4.3×2.8	25	1800	41.3	SA21TM330A28R25XXX
	47	7.3×4.3×2.8	20	2000	58.8	SA21TM470A28R20XXX
	56	7.3×4.3×2.8	15	2000	70.0	SA21TM560A28R15XXX
16 (18.4)	100	7.3×4.3×2.8	12	2500	125.0	SA21TM101A28R12XXX
	6.8	7.3×4.3×2.8	70	1000	10.9	SA21CM680A28R70XXX
	10	7.3×4.3×2.8	60	1000	16.0	SA21CM100A28R60XXX
	15	7.3×4.3×2.8	40	1000	24.0	SA21CM150A28R40XXX
	22	7.3×4.3×2.8	30	1600	35.2	SA21CM220A28R30XXX
	33	7.3×4.3×2.8	30	1600	52.8	SA21CM330A28R30XXX
	47	7.3×4.3×2.8	30	1600	75.2	SA21CM470A28R30XXX
	68	7.3×4.3×2.8	30	1600	108.8	SA21CM680A28R30XXX
25 (28.8)	100	7.3×4.3×2.8	25	1800	160	SA21CM101A28R25XXX
	10	7.3×4.3×2.8	45	1000	25.0	SA21EM100A28R45XXX
33	7.3×4.3×2.8	60	1400	82.5	SA21EM330A28R60XXX	

※ Specifications may be subject to change without notice.

Conductive Polymer Multilayer Type