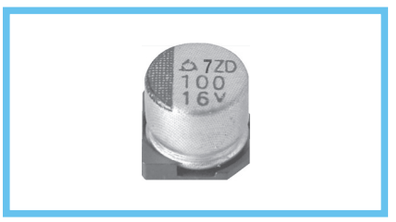
BDA Series

• 105℃ 2,000Hrs assured.

Solvent-proof

- Vertical SMD type.
- Long Life.
- For LED MT/TV, Copying Machine.
- RoHS compliant.
- Halogen-free capacitors are also available.

BDS (MVK) → BDA
Long Life



SPECIFICATIONS

Item	Characteristics
Rated Voltage Range	4 ~ 50 V_{DC}
Operating Temperature Range	-40 ~ +105℃
Capacitance Tolerance	±20%(M) (at 20℃, 120Hz)
Leakage Current	I=0.01CV(μA) or 3μA, whichever is greater. Where, I:Max. Leakage current(μA), C:Nominal capacitance(μF), V:Rated voltage(V_{DC}) (at 20℃, 2 minutes)
Dissipation Factor (Tanδ)	(at 20℃, 120Hz)
Temperature Characteristics (Max. Impedance ratio)	(at 120Hz)
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied for 2,000 hours at 105℃.
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements.
Others	Satisfied characteristics KS C IEC 60384-4

Dissipation Factor (Tanδ)

Rated voltage(V_{DC})	4	6.3	10	16	25	35	50
Tanδ(Max.)	0.37	0.28	0.24	0.20	0.16	0.13	0.12

Temperature Characteristics (Max. Impedance ratio)

Rated voltage(V_{DC})	4	6.3	10	16	25~50
Z(-25℃)/Z(20℃)	6	3	3	2	2
Z(-40℃)/Z(20℃)	12	8	5	4	3

Load Life

Rated voltage(V_{DC})	4 ~ 16	25 ~ 50
Capacitance change	≦ ±25% of the initial value	≦ ±20% of the initial value
Tanδ	≦ 200% of the initial specified value	
Leakage current	≦ The initial specified value	

Shelf Life

Rated voltage(V_{DC})	4 ~ 16	25 ~ 50
Capacitance change	≦ ±25% of the initial value	≦ ±20% of the initial value
Tanδ	≦ 200% of the initial specified value	
Leakage current	≦ The initial specified value	

PART NUMBERING SYSTEM

BDA 16 VC 100 M F60 TP

- TP: With tape
- F60: Case code
- M: Capacitance tolerance(±20%)
- 100: Nominal capacitance code (ex. 0.1μF:R1, 1.0μF:1, 4.7μF:4R7, 10μF:10)
- VC: Lead type
- 16: Rated voltage
- BDA: Series name

RATED RIPPLE CURRENT MULTIPLIERS

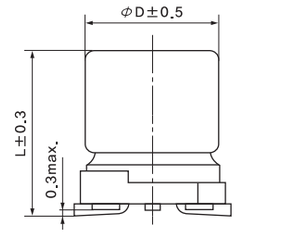
Frequency Multipliers

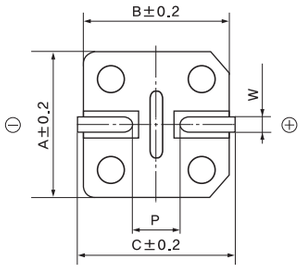
Cap.(μF) \ Freq.(Hz)	120	1K	10K	100K
1	1.00	1.50	1.75	1.80
2.2 ~ 10	1.00	1.30	1.40	1.50
22 ~ 100	1.00	1.05	1.08	1.08

DIMENSIONS OF BDA Series

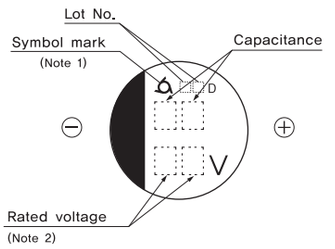
Unit(mm)

DIMENSIONS





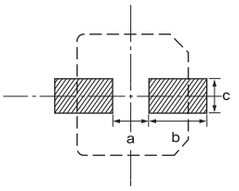
MARKING



Note 1 : 4×5.2(D55), 5×5.2(E55) is excluded symbol mark.
Note 2 : 6.3WV is marked by 6V.

Case code	ø D	L	A	B	C	W	P	a	b	c
D55	4	5.2	4.3	4.3	5.1	0.5-0.8	1.0	1.0	2.6	1.6
E55	5	5.2	5.3	5.3	5.9	0.5-0.8	1.4	1.4	3.0	1.6
F55	6.3	5.2	6.6	6.6	7.2	0.5-0.8	1.9	1.9	3.5	1.6
F60	6.3	5.7	6.6	6.6	7.2	0.5-0.8	1.9	1.9	3.5	1.6

Recommended solder land on PC board



: Solder land on PC board

RATINGS OF BDA Series

μF \ VDC	4		6.3		10		16		25		35		50	
1													D55	5.6
2.2													D55	10
3.3													D55	14
4.7									D55	13	D55	15	E55	19
10							D55	16	E55	25	E55	25	F55	29
22	D55	19	D55	21	E55	30	E55	30	F55	40	F55	40		
33	E55	30	E55	34	E55	34	F55	45	F55	45				
47	E55	34	E55	36	F55	48	F55	48	F60	52				
100	E55	45	F60	56	F60	90	F60	110						

Rated Ripple Current (mArms/105℃, 120Hz)

Case code