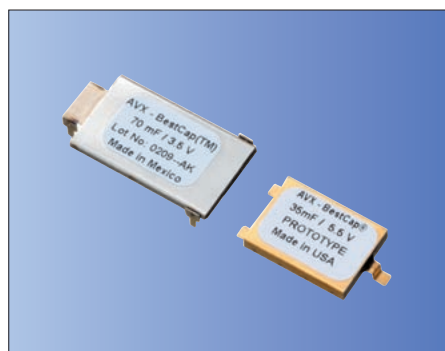


BestCap Low ESR Solid State Double Layer Capacitors



Ph Free

RoHS Compliant

Features

- High specific capacitance
- 0.01 farad to 1.0 farad
- Very low ESR down to 25 milliOhm
- Low profile: down to 2.1mm height
- High power pulse capability
- Leakage current 5-120 micro amperes
- Non-polar
- Foot prints 20×15mm or 28×17mm or 48×30mm
- Voltage ratings 3.5V-25V
- Operating temperature range: -20 to +70°C

Applications

- GSM/ GPRS Wireless Communication Products
- ADSL/ xDSL and Other Communication Equipment
- Automatic Meter Reading Systems
- Wireless Alarm Systems
- Memory Back-up
- Mainframe Computer De-coupling
- Hybrid Battery Packs
- Portable Medical Laser

How to Order

BZ 01 5 A 503 Z A B ☐ ☐

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Series (BZ: BestCap)

② Size

01/ 11	28×17mm	02/ 12	48×30mm
05/ 25	20×15mm	08	15×12mm

③ Rated Voltage (VDC)

3	3.6	9	9.0
4	4.0/ 4.5	C	12.0
5	5.5	F	15.0
7	7.0		

④ A: Standard
B/ C: LowProfile

⑤ Capacitance (μF)

ex:		204	200mF
603	60mF	105	1000mF

⑥ Tolerance

Z	+80%, -20%	P	+100%, -0%
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⑦ Lead Specifications

A	Through Hole Type
H	Through Hole with stand off Type
L/ S	Surface Mount Type

⑧ Package

B	Bulk in tray
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⑨ Option

Ratings and Part Number Reference

● BZ01/ BZ11 case size

AVX Part Number	Rated Voltage (V)	Cap (mF)	ESR (mΩ@1kHz)		Leakage Current (max. μA)	Height (mm/ max.)				
			typ.	max.		A-lead	H-lead	L-lead	S-lead	S-lead (AJ)*
BZ013B503Z B	3.6	50	100	120	5	—	—	—	3.2	2.1
BZ013A703Z B		70	140	168	5	3.5	6.4	—	4.0	2.9
BZ013A144Z B		140	70	84	5	5.3	8.2	—	5.8	—
BZ014B333Z B	4.5	33	150	180	5	—	—	—	3.5	2.4
BZ015B303Z B		30	160	192	5	—	—	—	3.8	2.7
BZ015A503Z B		50	160	192	5	4.1	7.0	—	4.6	3.5
BZ015B603Z B	5.5	60	80	96	10	5.4	8.3	—	5.9	—
BZ015A104Z B		100	80	96	10	6.7	9.6	—	7.2	—
BZ017A333Z B	7	33	225	270	5	5.1	8.0	—	5.6	4.5
BZ019B223Z B	9	22	250	300	5	4.7	7.6	—	5.2	4.1
BZ019A333Z B		33	250	300	5	5.5	8.4	—	6.0	4.9
BZ01CB153Z B		15	350	420	5	5.9	8.8	—	6.4	5.3
BZ01CA223Z B	12	22	350	420	5	7.1	10.0	—	7.6	6.5
BZ11CA473ZSB		47	350	420	10	—	—	—	6.5	—

* Select S-Lead BZ01 BestCap are available with insulation on the bottom of the part and zero clearance from the PCB. To order, please add special requirement AJ to the end of the part number.
Example) BZ013B503ZSBAJ

● BZ02/ BZ12 case size

AVX Part Number	Rated Voltage (V)	Cap (mF)	ESR (mΩ@1kHz)		Leakage Current (max. μA)	Height (mm/ max.)		
			typ.	max.		A-lead	H-lead	L-lead
BZ023A284Z B	3.6	280	45	54	20	3.5	6.4	3.7
BZ023A564Z B		560	25	30	40	5.3	8.2	5.5
BZ025A204Z B		200	60	72	20	4.1	7.0	4.3
BZ025A404Z B	5.5	400	35	42	40	6.7	9.6	6.9
BZ029A124Z B		120	70	84	20	5.8	8.7	6.0
BZ02CA903Z B	9	90	90	108	20	7.4	10.3	7.6
BZ125A105ZAB	5.5	1000	35	42	120	6.1	—	—
BZ125A105ZLB		1000	35	42	120	—	—	6.1

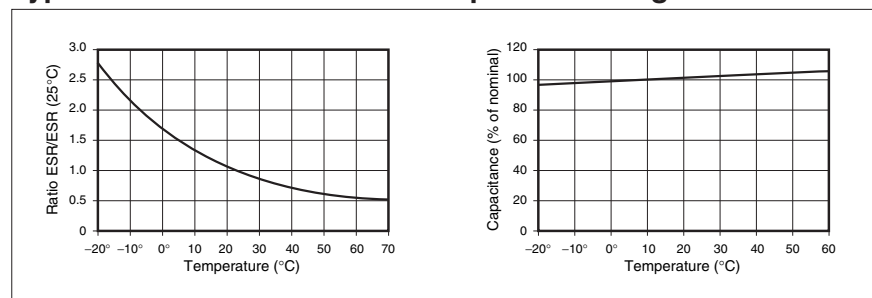
● BZ05/ BZ25 case size

AVX Part Number	Rated Voltage (V)	Cap (mF)	ESR (mΩ@1kHz)		Leakage Current (max. μA)	Height (mm/ max.)	
			typ.	max.		N-lead	S-lead
BZ254B223ZSBCE	4.0	22	140	168	5	—	1.9
BZ254B223ZNBCE		22	140	168	5	1.9	—
BZ254B473ZSBCK		47	80	96	10	—	2.95
BZ054B223Z B	4.5	22	170	204	5	—	2.1
BZ055B153Z B		15	250	300	5	—	2.7
BZ055A333Z B		33	250	300	5	—	3.5
BZ055B333Z B	5.5	33	125	150	10	—	4.8
BZ055A683Z B		68	125	150	10	—	6.1
BZ05CA103Z B	12	10	500	600	5	—	6.5
BZ05FB682ZSBBH	15	6.8	600	720	10	—	4.8
BZ05FB682ZNBH		6.8	600	720	10	5.8	—

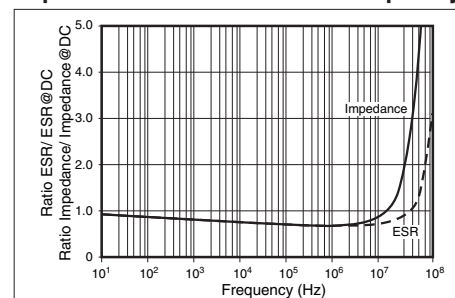
● BZ08 case size

AVX Part Number	Rated Voltage (V)	Cap (mF)	ESR (mΩ@1kHz)		Leakage Current (max. μA)	Height (mm/ max.)	
			typ.	max.		N-lead	S-lead
BZ084B103ZNB	4.5	10	680	816	5	—	2.2

Typical Characteristics Over Temperature Range:

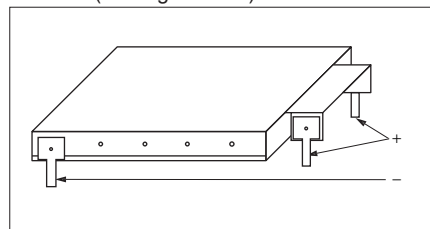


Impedance and ESR Versus Frequency

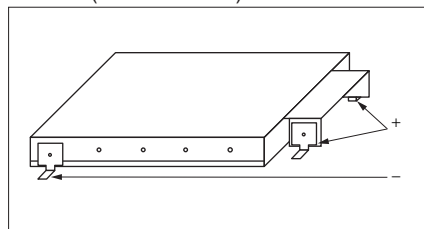


Lead Types

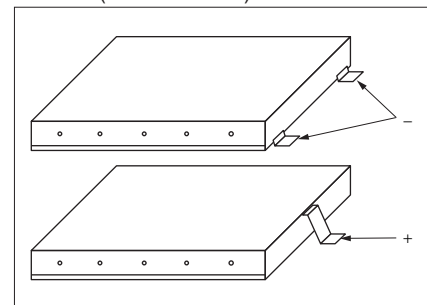
• A Lead (Through – Hole)



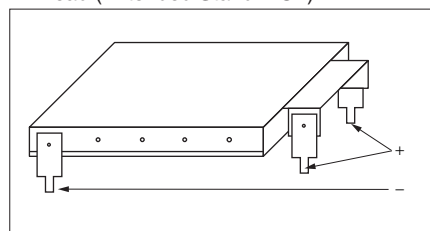
• L Lead (Surface Mount)



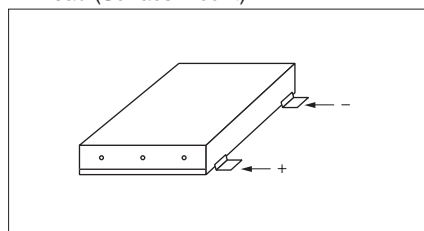
• S Lead (Surface Mount)



• H Lead (Extended Stand – Off)

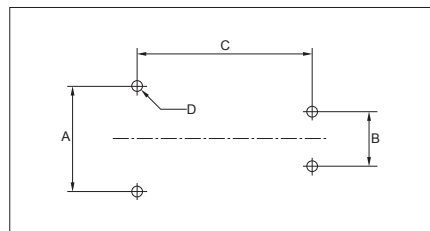


• N Lead (Surface Mount)



Recommended Footprint Dimensions

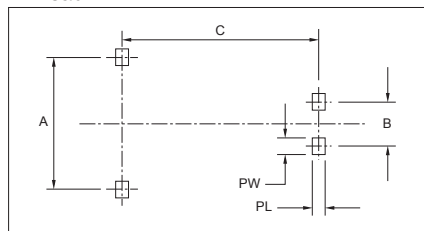
• A Lead



Pad dimensions: mm

Case	A ±0.05	B ±0.05	C ±0.05	D ±0.1
BZ01	17.25	8.9	28	φ1.4
BZ02/ BZ12	30.25	8.9	48	φ1.4

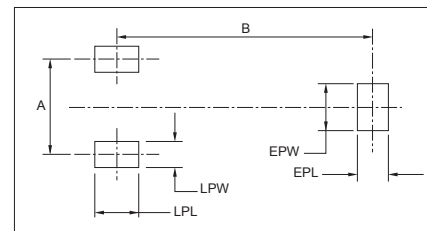
• L Lead



Pad dimensions: mm

Case	A ±0.1	B ±0.1	C ±0.1	PL ±0.2	PW ±0.2
BZ01/ BZ11	19.2	10.8	28	3.2	3.7
BZ02	32.2	10.8	48	3.2	3.7

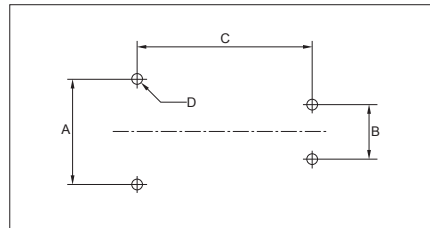
• S Lead



Pad dimensions: mm

Case	A ±0.1	B ±0.1	EPL ±0.1	EPW ±0.1	LPL ±0.1	LPW ±0.1
BZ01/ BZ11	13	35.1	4.5	6	5.8	3.5
BZ05/ BZ25	10	25	3	4.5	2.9	4.5

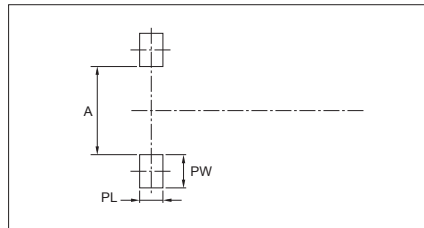
• H Lead



Pad dimensions: mm

Case	A ±0.05	B ±0.05	C ±0.05	D ±0.1
BZ01	17.25	8.9	28	φ1.4
BZ02	30.25	8.9	48	φ1.4

• N Lead



Pad dimensions: mm

Case	A	PL ±0.1	PW ±0.1
BZ25/ BZ08	5.9	2.9	4.1

Mouser Electronics

Authorized Distributor

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