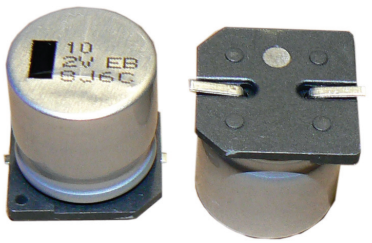
Type AEB

SMT Aluminum Electrolytic Capacitors - High Voltage, 105 °C

Low Impedance and Long Life for High Voltage, High Ripple Current Applications



Type AEB capacitors are it for high voltage applications like input bus capacitors in board mounted miniature AC/DC supplies. The AEB's low impedance in ratings up to 450 Vdc, and long life, make it ideal for power supply input and other high voltage applications. The vertical, cylindrical cases make easy automatic mounting and reflow soldering.

Highlights

- +105 °C, Up to 5000 Hour Load Life
- Capacitance Range: 2.2 µF to 100 µF
- Voltage Range: 160 Vdc to 450 Vdc

Specifications

Operating Temperature: –25 °C to +105 °C
Rated Voltage: 160, 200, 250, 350, 400, 450 Vdc
Capacitance: 2.2 µF to 100 µF
Capacitance Tolerance: ±20% @ 120 Hz and +20 °C
Impedance Ratio (at 120 Hz):

Rated Voltage	160	200	250	350	400	450
Z(-25°C)/Z(+20°C)	2	2	3	5	6	6

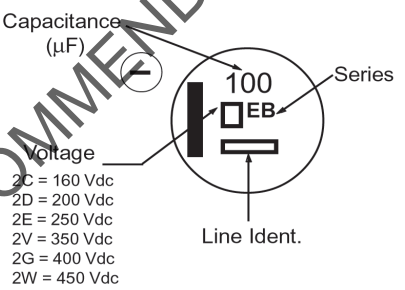
RoHS Compliant

Complies with the EU Directive 2002/95/EC requirement restricting the use of Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent chromium (Cr(VI)), PolyBrominated Biphenyls (PBB) and PolyBrominated Diphenyl Ethers (PBDE).

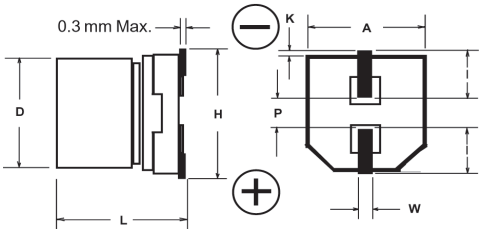
Life Test: 5000 h @ +105 °C, L — S Cases
4000 h @ +105 °C, K Case
3000 h @ +105 ºC, J Case
Δ Capacitance ± 20%
DF: ≤ 200% of limit
DCL: ≤ 100% of limit

Shelf Test: 1000 h @ 105 °C
Δ Capacitance ± 20%
DF: ≤ 200% of limit
DCL: ≤ 100% of limit

AEB Series Marking



Outline Drawing



Case Dimensions

Case Code	D ±0.5	L ±0.5	A ±0.2	H (max)	I (ref)	W	P (ref)	K (mm)
J	10.0	13.5	10.3	12	3.5	0.9 ±0.2	4.6	0.7 ± 0.2
K	10.0	16.5	10.3	12	3.5	0.9 ±0.2	4.6	0.7 ± 0.2
L	12.5	16.5	13.5	15	4.7	0.9 ±0.3	4.4	0.7 ± 0.3
P	16.0	16.5	17.0	19	5.5	1.2 ±0.3	6.7	0.7 ± 0.3
U	16.0	21.5	17.0	19	5.5	1.2 ±0.3	6.7	0.7 ± 0.3
R	18.0	16.5	19.0	21	6.7	1.2 ±0.3	6.7	0.7 ± 0.3
S	18.0	21.5	19.0	21	6.7	1.2 ±0.3	6.7	0.7 ± 0.3

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Ratings

Cap (µF)	Catalog Part Number	Max. DCL 2 min (µA)	Max. Dissipation Factor @ 120 Hz 20 °C	Max. Impedance @ 100 kHz 20 °C (Ω)	Max. Ripple Current @ 105 °C 100 kHz (mA)	Size (mm) D x L	Quantity Reel
			160 Vdc				
10.0	AEB106M2CJ32T-F	106	0.15	3.00	70	10 x 13.5	250
33.0	AEB336M2CL32T-F	327	0.15	1.80	470	12.5 x 16.5	150
47.0	AEB476M2CP44T-F	461	0.15	1.40	600	16 x 16.5	125
68.0	AEB686M2CU44T-F	663	0.15	0.55	750	16 x 21.5	75
68.0	AEB686M2CR44T-F	663	0.15	0.80	750	18 x 16.5	125
100.0	AEB107M2CS44T-F	970	0.15	0.50	1060	18 x 21.5	75
			200 Vdc				
22.0	AEB226M2DL32T-F	274	0.15	1.80	470	12.5 x 16.5	150
33.0	AEB336M2DP44T-F	406	0.15	1.40	600	16 x 16.5	125
47.0	AEB476M2DR44T-F	574	0.15	0.80	600	18 x 16.5	125
68.0	AEB686M2DU44T-F	826	0.15	0.55	750	16 x 21.5	75
100.0	AEB107M2DS44T-F	1210	0.15	0.50	1060	18 x 21.5	75
			250 Vdc				
10.0	AEB106M2EK32T-F	160	0.15	2.50	88	10 x 16.5	200
22.0	AEB226M2EP44T-F	340	0.15	1.60	560	16 x 16.5	125
33.0	AEB336M2ER44T-F	505	0.15	0.85	560	18 x 16.5	125
47.0	AEB476M2EU44T-F	715	0.15	0.70	710	16 x 21.5	75
68.0	AEB686M2ES44T-F	1030	0.15	0.60	990	18 x 21.5	75
			350 Vdc				
10.0	AEB106M2VP44T-F	220	0.20	3.20	270	16 x 16.5	125
22.0	AEB226M2VR44T-F	472	0.20	1.60	350	18 x 16.5	125
33.0	AEB336M2VU44T-F	703	0.20	1.20	480	16 x 21.5	75
47.0	AEB476M2VS44T-F	997	0.20	1.00	670	18 x 21.5	75
			400 Vdc				
3.3	AEB335M2GJ32T-F	89	0.24	8.00	40	10 x 13.5	250
4.7	AEB475M2GK32T-F	123	0.24	5.50	50	10 x 16.5	200
10.0	AEB106M2GP44T-F	250	0.24	3.60	250	16 x 16.5	125
22.0	AEB226M2GU44T-F	538	0.24	2.20	410	16 x 21.5	75
33.0	AEB336M2GS44T-F	802	0.24	1.20	600	18 x 21.5	75
			450 Vdc				
2.2	AEB225M2WJ32T-F	69	0.24	11.00	29	10 x 13.5	250
3.3	AEB335M2WK32T-F	99	0.24	7.00	41	10 x 16.5	200
4.7	AEB475M2WL32T-F	137	0.24	4.80	49	12.5 x 16.5	150
10.0	AEB106M2WR44T-F	280	0.24	3.00	310	18 x 16.5	125
22.0	AEB226M2WS44T-F	604	0.24	1.80	560	18 x 21.5	75

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Part Numbering System

AEB	106	M	2C	J	32T	-F
Type	**Capacitance** 105 = 1.0 µF 106 = 10.0 µF 107 = 100.0 µF	**Capacitance Tolerance** M = ±20%	**Voltage Code** 2C = 160 Vdc 2D = 200 Vdc 2E = 250 Vdc 2V = 350 Vdc 2G = 400 Vdc 2W = 450 Vdc	**Case Code**	**Packaging Information** 32 = Carrier tape Width (mm) T = Tape & Reel B = bulk	**RoHS Compliant**

See the Aluminum SMT Application Guide for Packaging Information.

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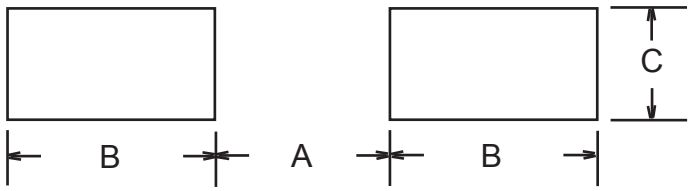
Recommended Land Pattern

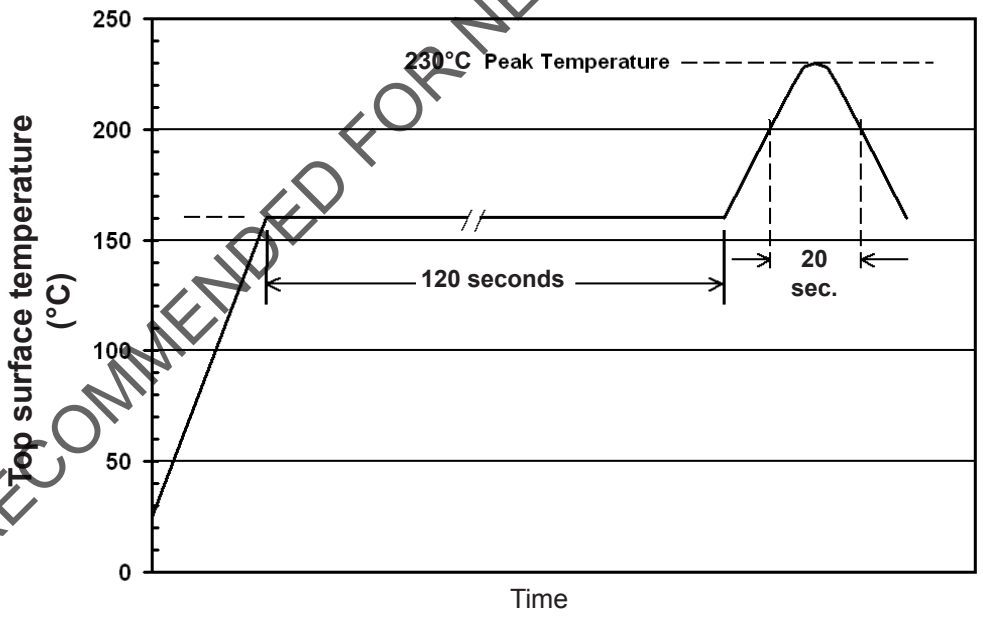


Case Code	Case Dia. (mm)	A (mm)	B (mm)	C (mm)
J	10	4.0	4.5	2.0
K	10	4.0	4.5	2.0
L	12.5	4.0	5.7	2.0
P	16	6.0	6.5	2.5
U	16	6.0	6.5	2.5
R	18	6.0	7.5	2.5
S	18	6.0	7.5	2.5

Ripple Current Correction Factor

Vdc	Ripple Current Correction Factor vs Frequency			
	120 Hz	1kHz	10kHz to 30kHz	30kHz to 100kHz
160 to 250	0.55	0.85	0.90	1.00
350 to 450	0.50	0.80	0.90	1.00

Recommended Reflow Soldering Profile for AEB Series (10 to 18 mm dia.)



Max. top surface temperature during reflow soldering	**230°C**
Maximum time at peak temperature	**5 seconds**
Maximum time at or above 200°C	**20 seconds**
Number of reflow processes	**1**
Terminal Material	**copper clad iron**

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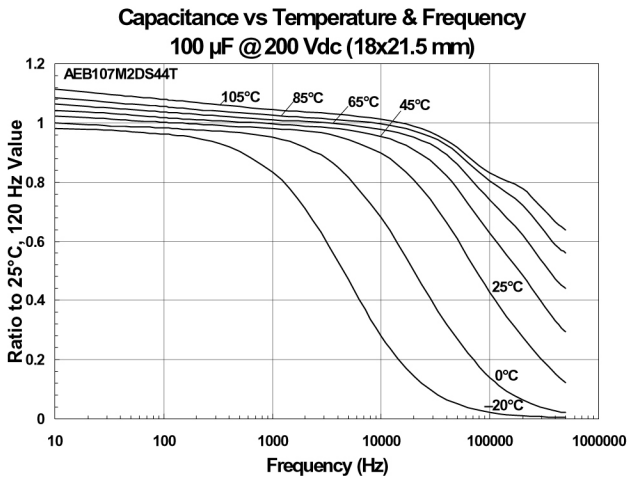
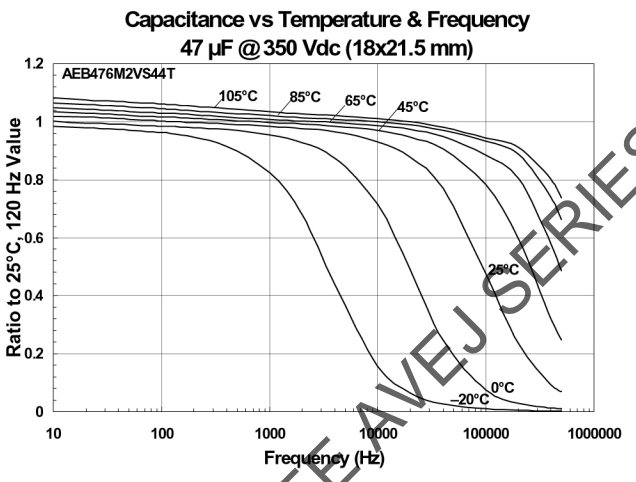
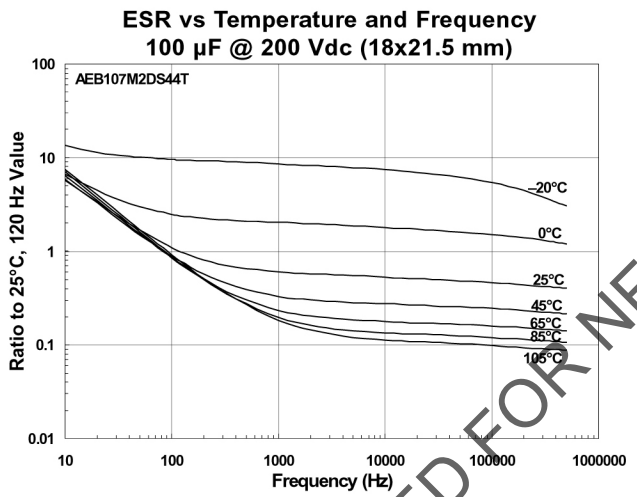
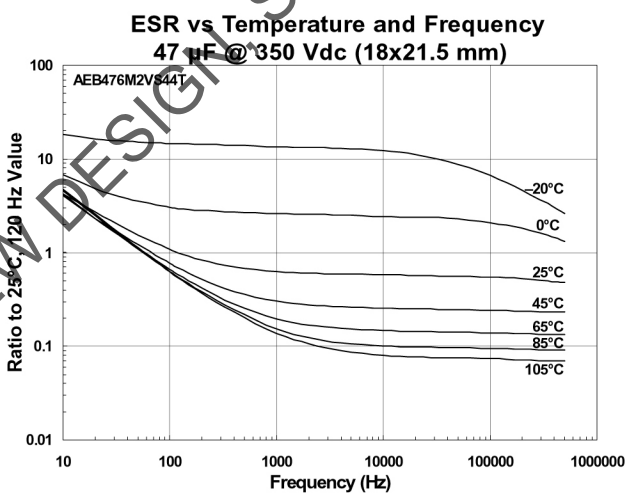
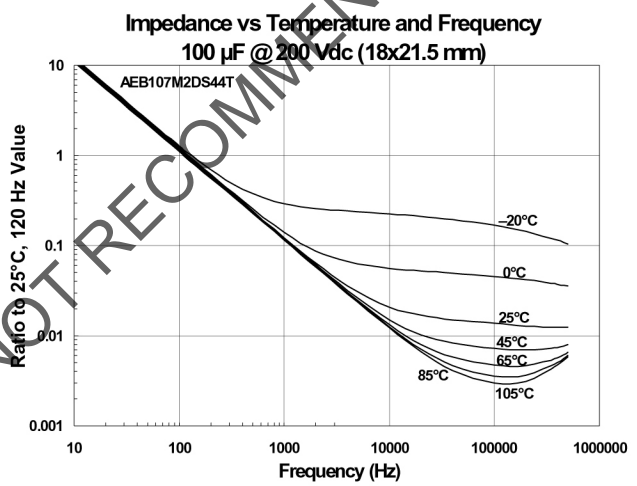
Typical Performance Curves

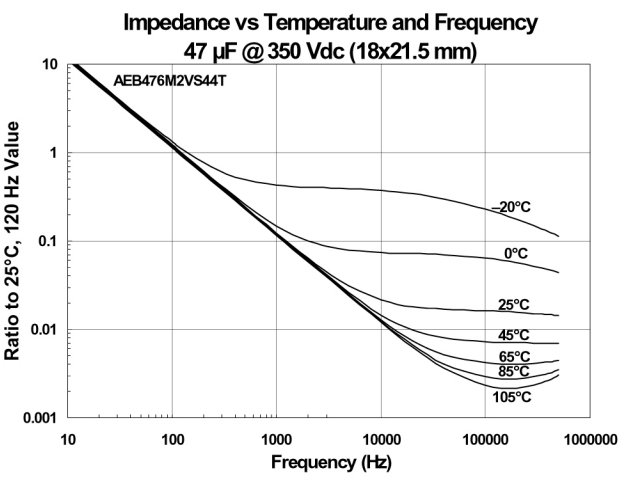












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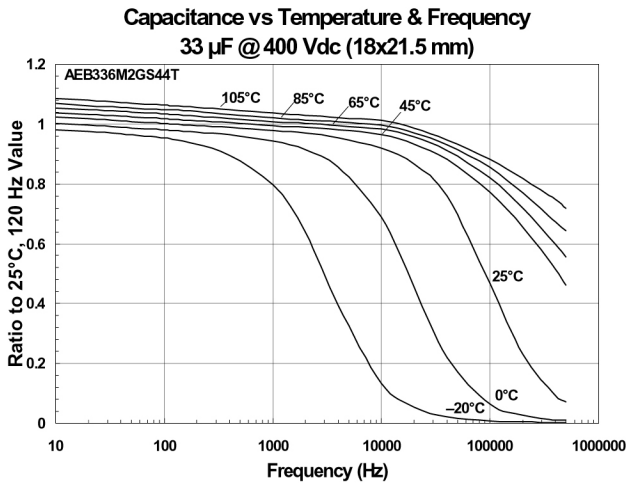

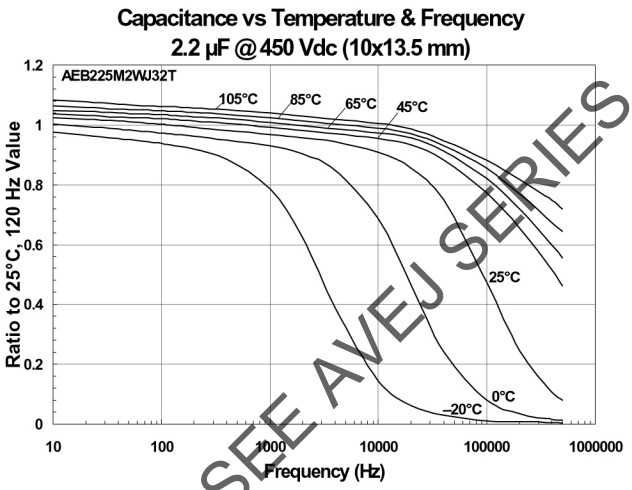

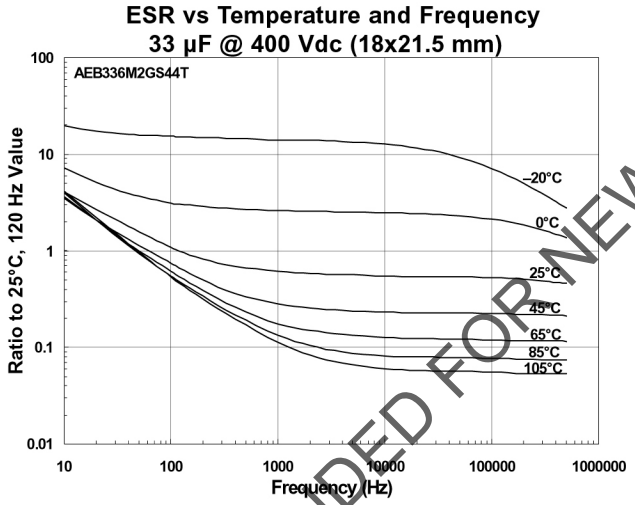

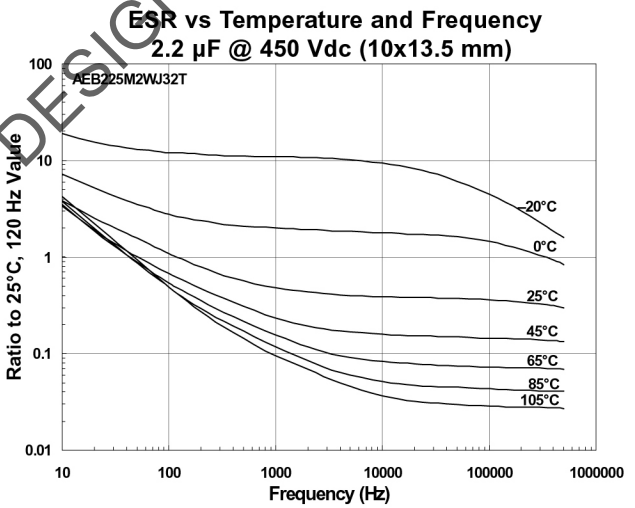

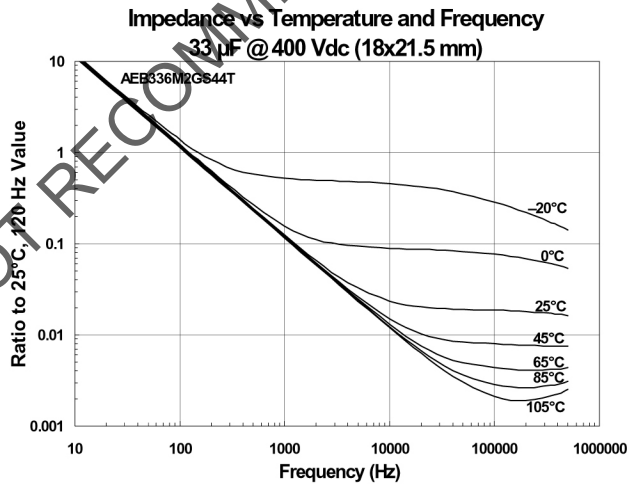

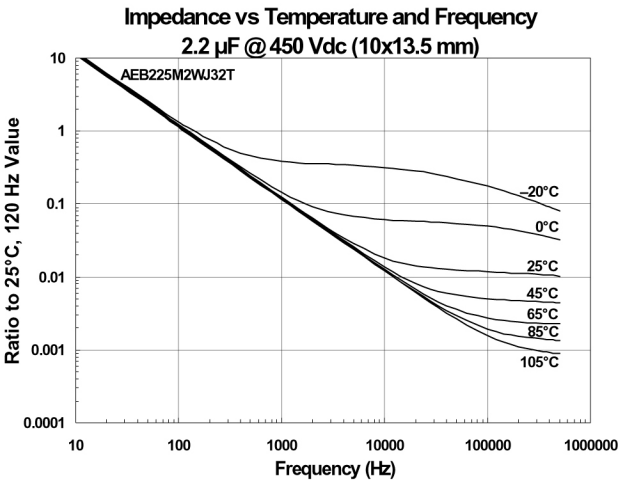

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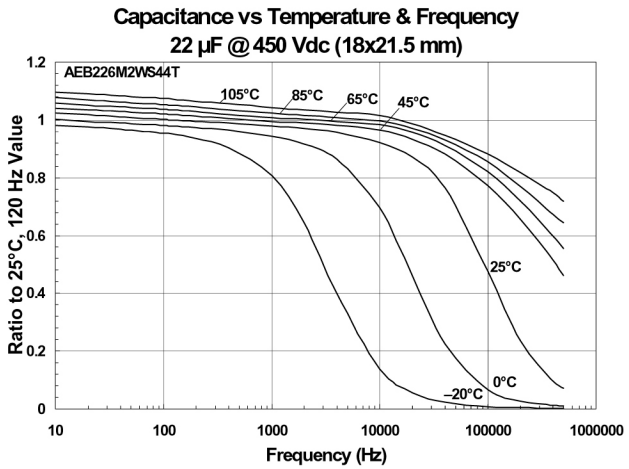

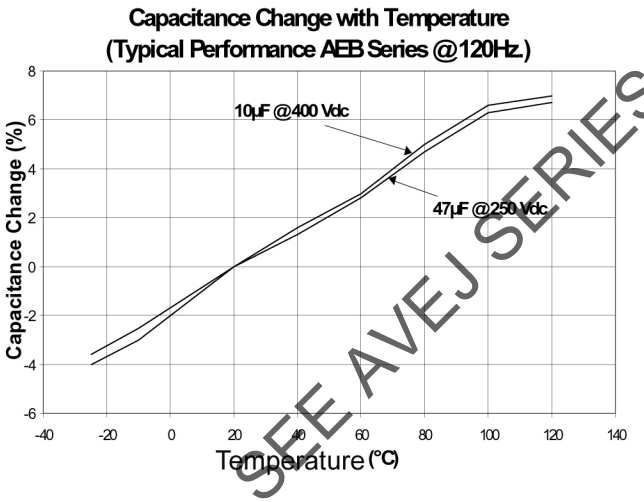

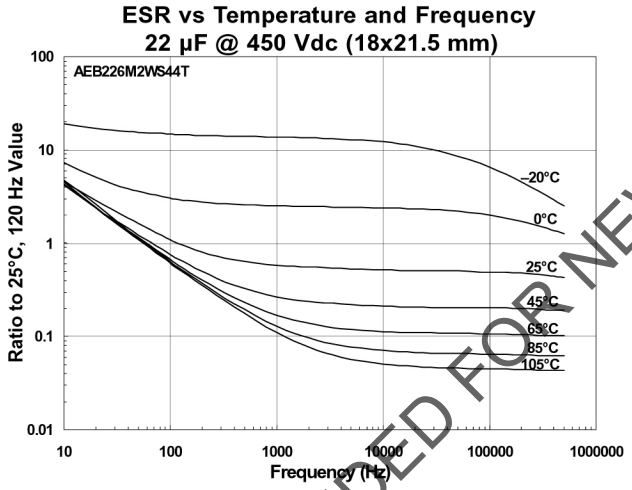

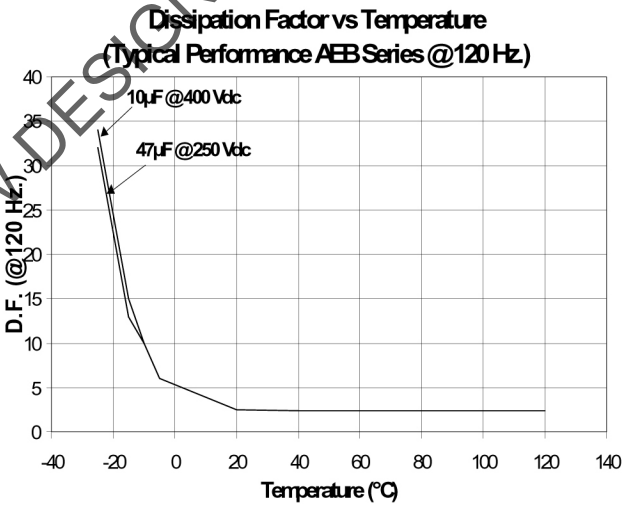

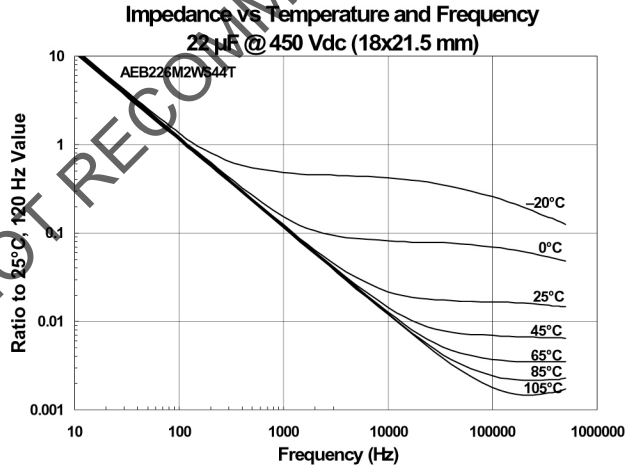

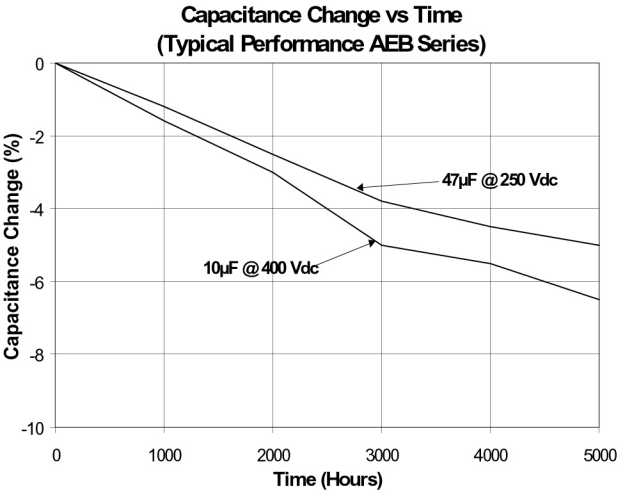

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Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

Данный компонент на территории Российской Федерации

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http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

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Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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