

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 μ F to 100 μ F
- ◆ Voltage Range: 160 Vdc to 450 Vdc

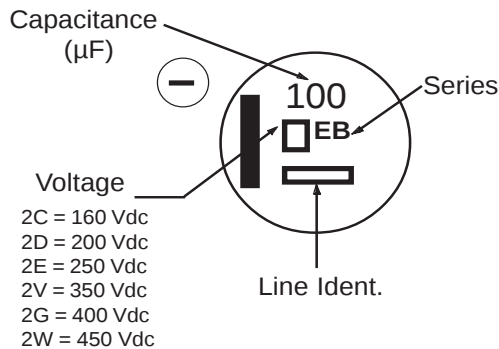
Specifications

Operating Temperature:	-20 °C to +105 °C
Rated Voltage:	160, 200, 250, 350, 400, 450 Vdc
Capacitance:	2.2 μ F to 100 μ F
Capacitance Tolerance:	$\pm$ 20% @ 120 Hz and +20 °C

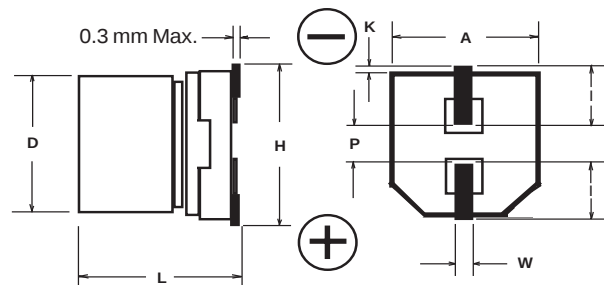
Life Test: 5000 h @ +105 °C, L — S Cases
 4000 h @ +105 °C, K Case
 3000 h @ +105 °C, J Case
 Δ Capacitance $\pm$ 20%
 DF: $\leq$ 200% of limit
 DCL: $\leq$ 100% of limit

Shelf Test: 1000 h @ 105 °C
 Δ Capacitance $\pm$ 20%
 DF: $\leq$ 200% of limit
 DCL: $\leq$ 100% of limit

EB Series Marking



Outline Drawing



Case Dimensions

Case Code	D $\pm$ 0.5	L $\pm$ 0.5	A $\pm$ 0.2	H (max)	I (ref)	W	P (ref)	K (mm)
J	10.0	13.5	10.3	12	3.5	0.9 $\pm$ 0.2	4.6	0.7 $\pm$ 0.2
K	10.0	16.5	10.3	12	3.5	0.9 $\pm$ 0.2	4.6	0.7 $\pm$ 0.2
L	12.5	16.5	13.5	15	4.7	0.9 $\pm$ 0.3	4.4	0.7 $\pm$ 0.3
P	16.0	16.5	17.0	19	6.7	1.2 $\pm$ 0.3	6.7	0.7 $\pm$ 0.3
U	16.0	21.5	17.0	19	6.7	1.2 $\pm$ 0.3	6.7	0.7 $\pm$ 0.3
R	18.0	16.5	19.0	21	6.7	1.2 $\pm$ 0.3	6.7	0.7 $\pm$ 0.3
S	18.0	21.5	19.0	21	6.7	1.2 $\pm$ 0.3	6.7	0.7 $\pm$ 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 Per Reel
160 Vdc							
10.0	AEB106M2CJ32T	106	0.15	3.00	70	10 x 13.5	250
33.0	AEB336M2CL32T	327	0.15	1.80	470	12.5 x 16.5	150
47.0	AEB476M2CP44T	461	0.15	1.40	600	16 x 16.5	125
68.0	AEB686M2CU44T	663	0.15	0.55	750	16 x 21.5	75
68.0	AEB686M2CR44T	663	0.15	0.80	750	18 x 16.5	125
100.0	AEB107M2CS44T	970	0.15	0.50	1060	18 x 21.5	75
200 Vdc							
22.0	AEB226M2DL32T	274	0.15	1.80	470	12.5 x 16.5	150
33.0	AEB336M2DP44T	406	0.15	1.40	600	16 x 16.5	125
47.0	AEB476M2DR44T	574	0.15	0.80	600	18 x 16.5	125
68.0	AEB686M2DU44T	826	0.15	0.55	750	16 x 21.5	75
100.0	AEB107M2DS44T	1210	0.15	0.50	1060	18 x 21.5	75
250 Vdc							
10.0	AEB106M2EK32T	160	0.15	2.50	88	10 x 16.5	200
22.0	AEB226M2EP44T	340	0.15	1.60	560	16 x 16.5	125
33.0	AEB336M2ER44T	505	0.15	0.85	560	18 x 16.5	125
47.0	AEB476M2EU44T	715	0.15	0.70	710	16 x 21.5	75
68.0	AEB686M2ES44T	1030	0.15	0.60	990	18 x 21.5	75
350 Vdc							
10.0	AEB106M2VP44T	220	0.20	3.20	270	16 x 16.5	125
22.0	AEB226M2VR44T	472	0.20	1.60	350	18 x 16.5	125
33.0	AEB336M2VU44T	703	0.20	1.20	480	16 x 21.5	75
47.0	AEB476M2VS44T	997	0.20	1.00	670	18 x 21.5	75
400 Vdc							
3.3	AEB335M2GJ32T	89	0.24	8.00	40	10 x 13.5	250
4.7	AEB475M2GK32T	123	0.24	5.50	50	10 x 16.5	200
10.0	AEB106M2GP44T	250	0.24	3.60	250	16 x 16.5	125
22.0	AEB226M2GU44T	538	0.24	2.20	410	16 x 21.5	75
33.0	AEB336M2GS44T	802	0.24	1.20	600	18 x 21.5	75
450 Vdc							
2.2	AEB225M2WJ32T	69	0.24	11.00	29	10 x 13.5	250
3.3	AEB335M2WK32T	99	0.24	7.00	41	10 x 16.5	200
4.7	AEB475M2WL32T	137	0.24	4.80	49	12.5 x 16.5	150
10.0	AEB106M2WR44T	280	0.24	3.00	310	18 x 16.5	125
22.0	AEB226M2WS44T	604	0.24	1.80	560	18 x 21.5	75

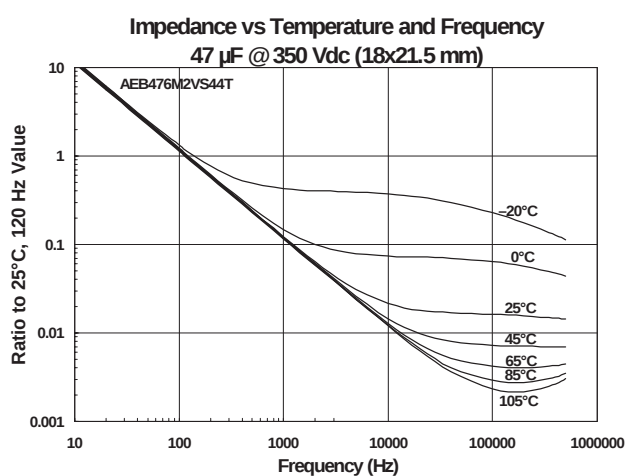
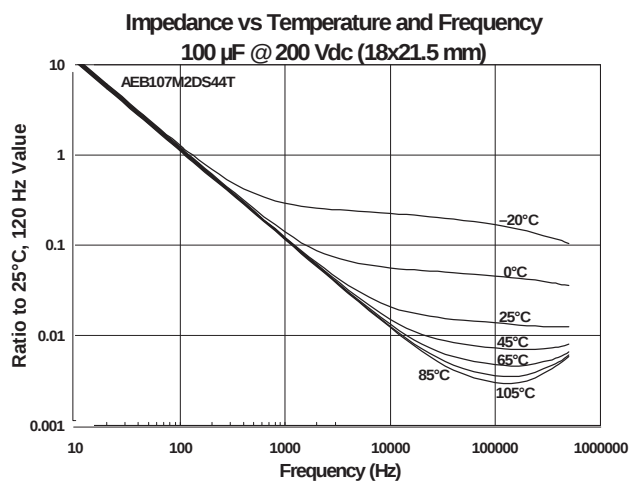
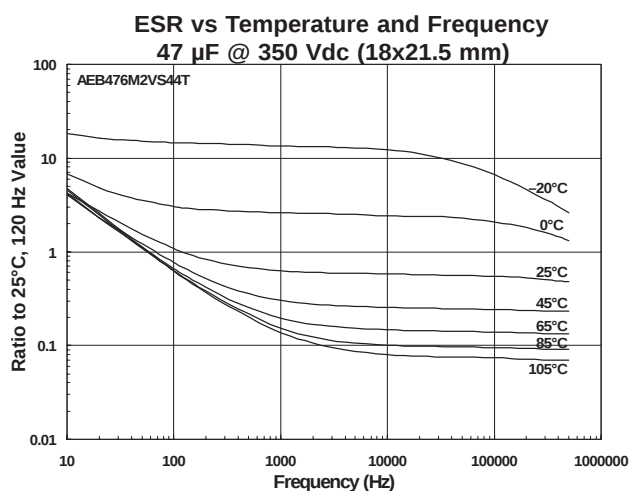
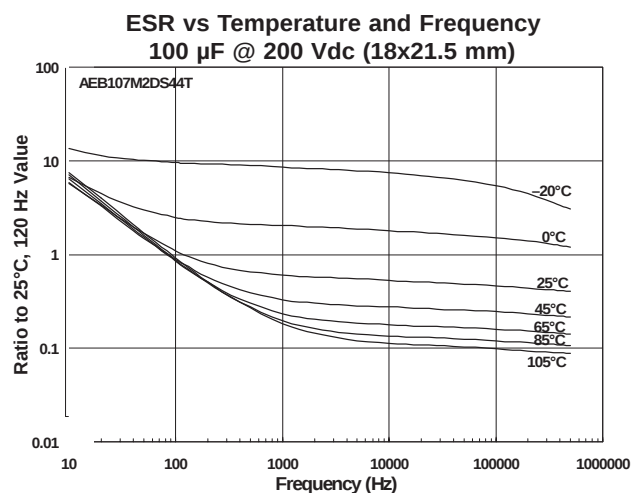
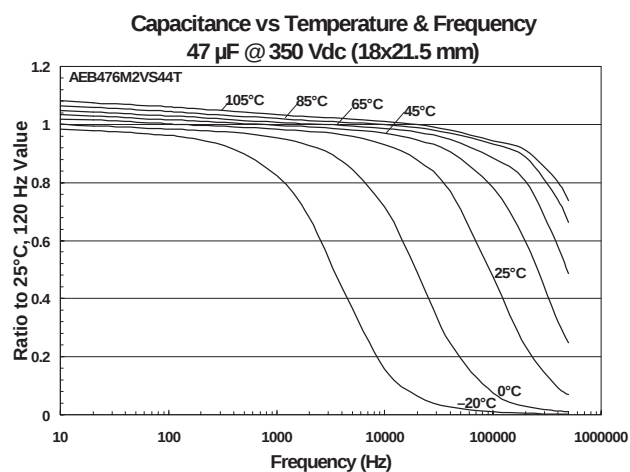
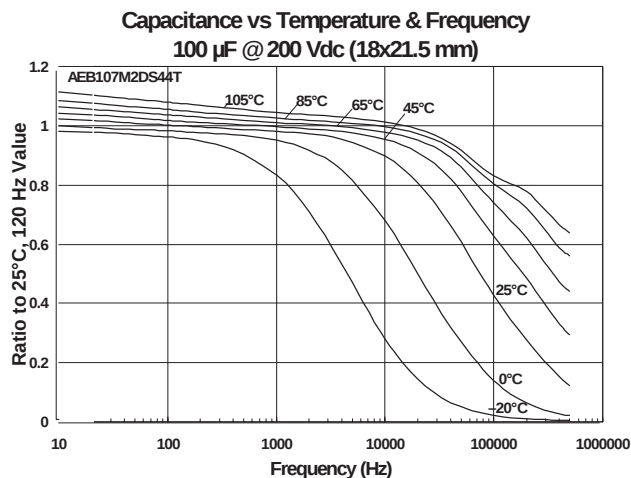
SMT & Chip
Capacitors

Part Numbering System

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

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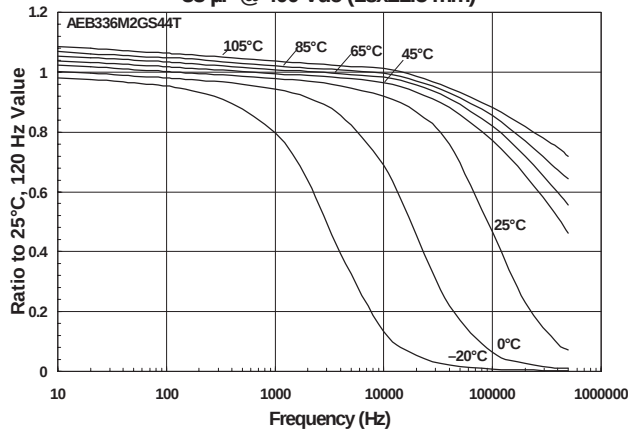
Typical Performance Curves



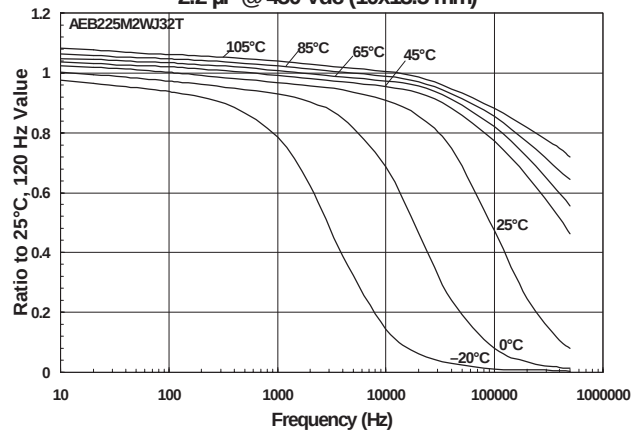
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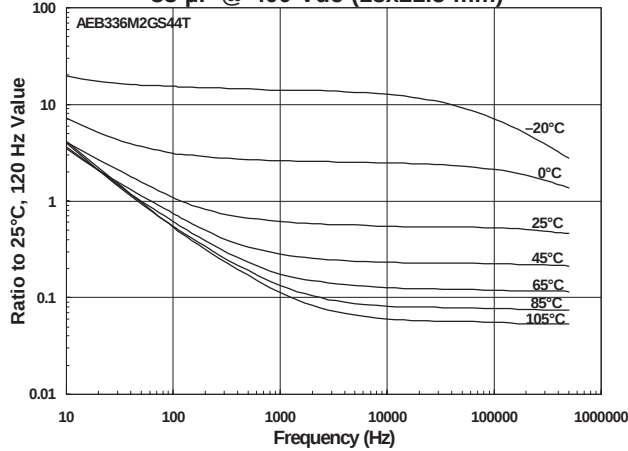
Capacitance vs Temperature & Frequency
33 μ F @ 400 Vdc (18x21.5 mm)



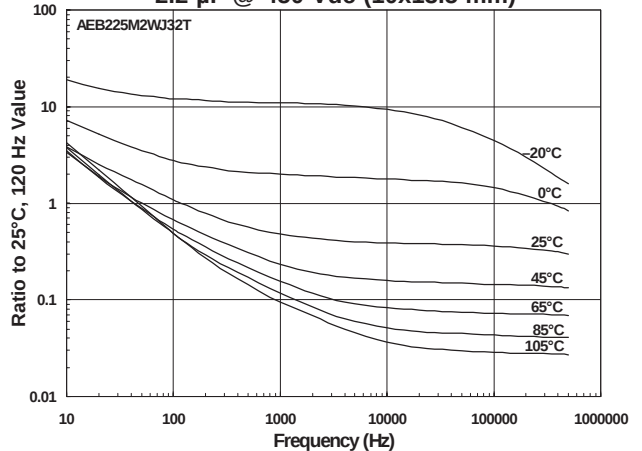
Capacitance vs Temperature & Frequency
2.2 μ F @ 450 Vdc (10x13.5 mm)



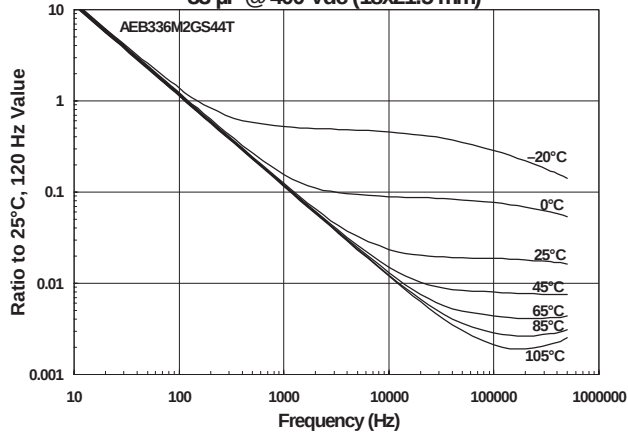
ESR vs Temperature and Frequency
33 μ F @ 400 Vdc (18x21.5 mm)



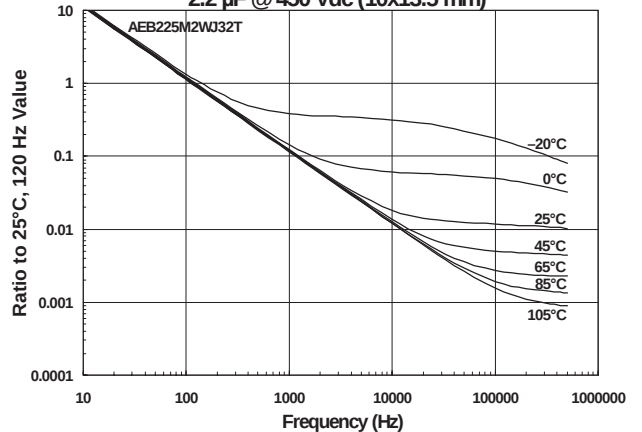
ESR vs Temperature and Frequency
2.2 μ F @ 450 Vdc (10x13.5 mm)



Impedance vs Temperature and Frequency
33 μ F @ 400 Vdc (18x21.5 mm)

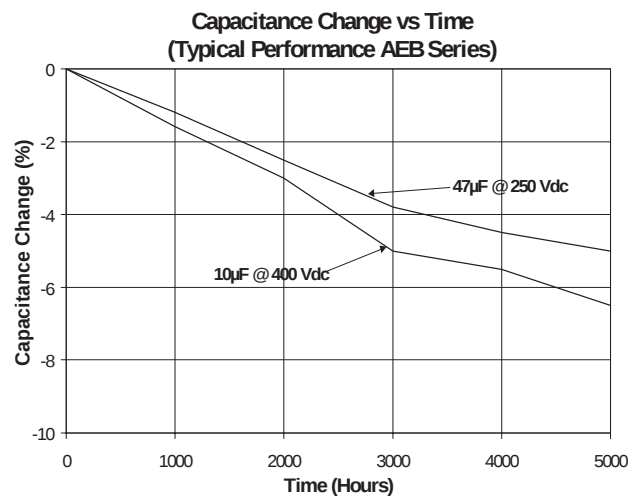
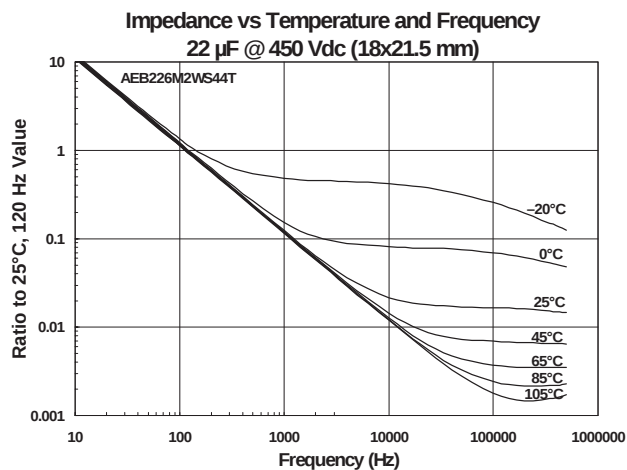
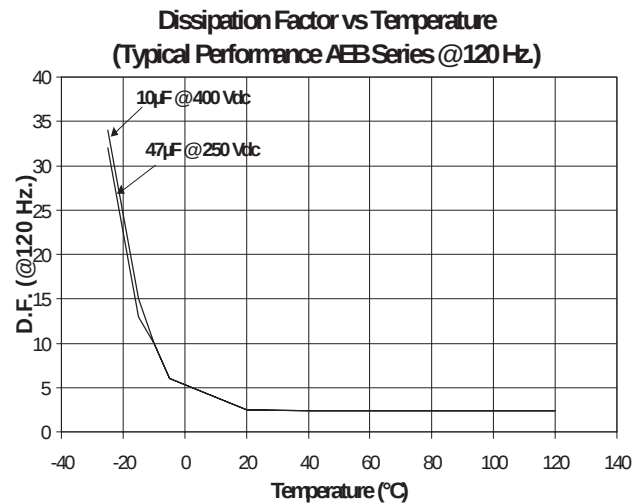
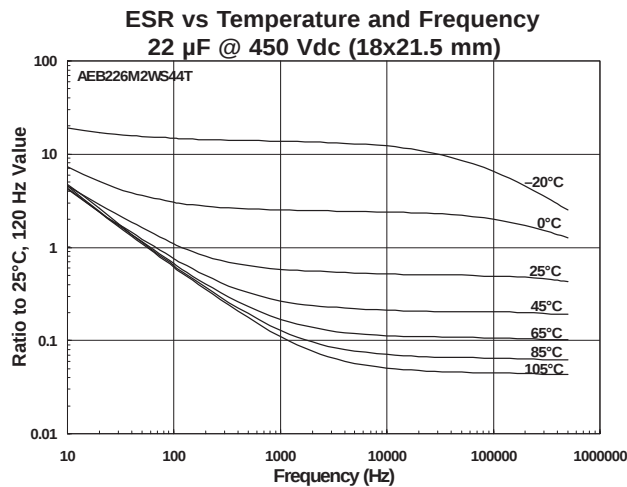
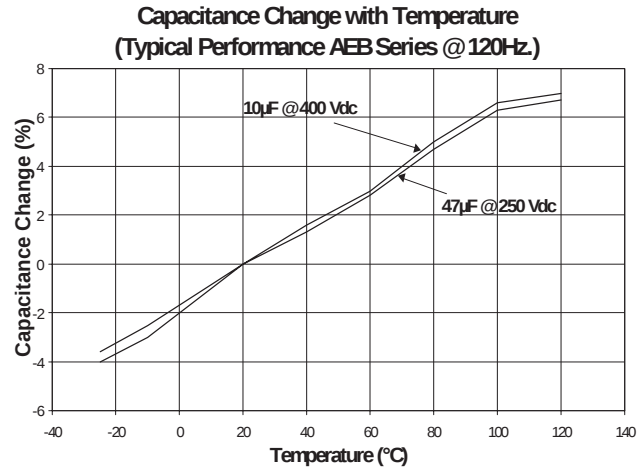
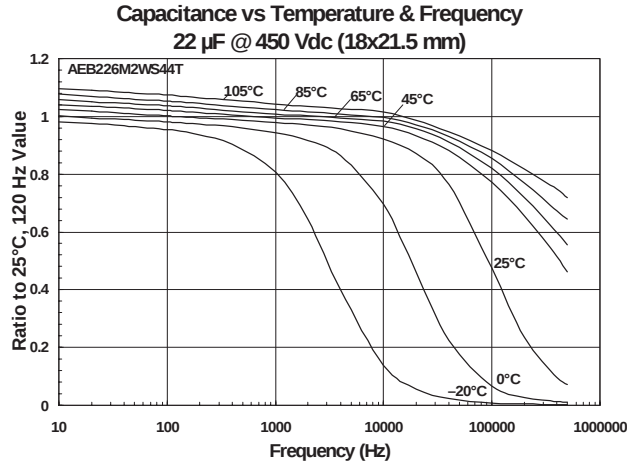


Impedance vs Temperature and Frequency
2.2 μ F @ 450 Vdc (10x13.5 mm)



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