



Reliability Data

Surface Mount Aluminum Electrolytic Capacitors

MVE series

Test:

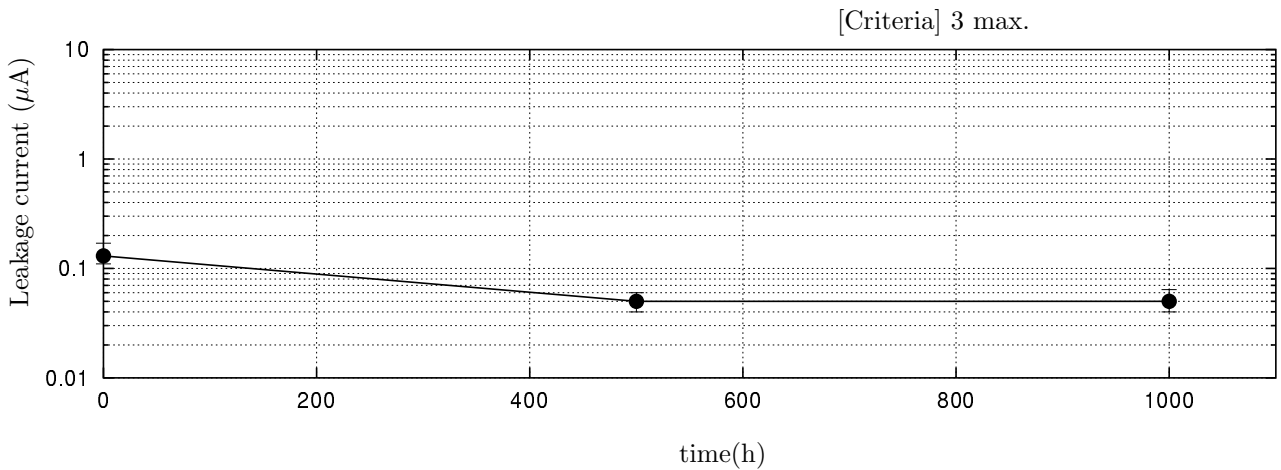
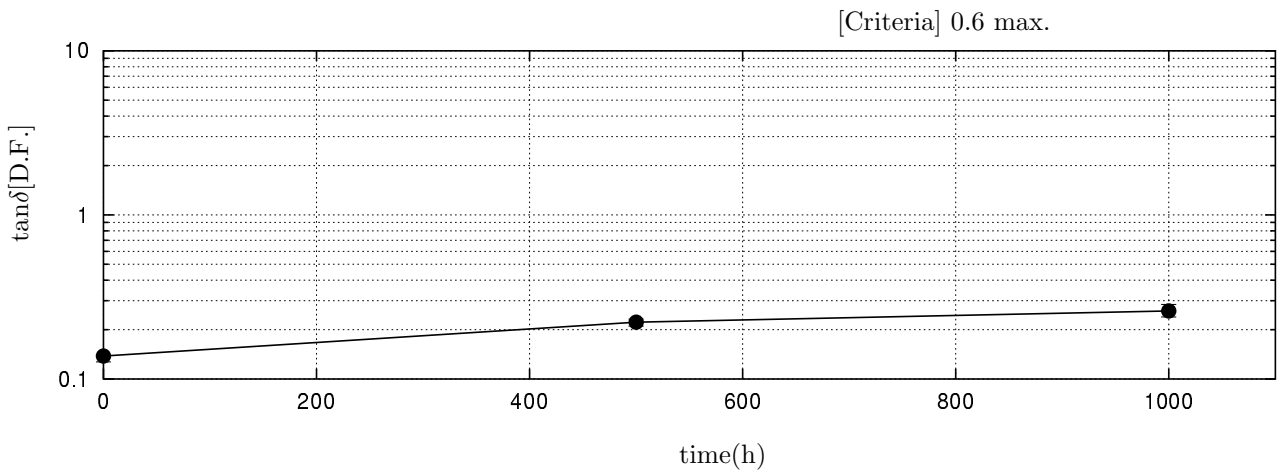
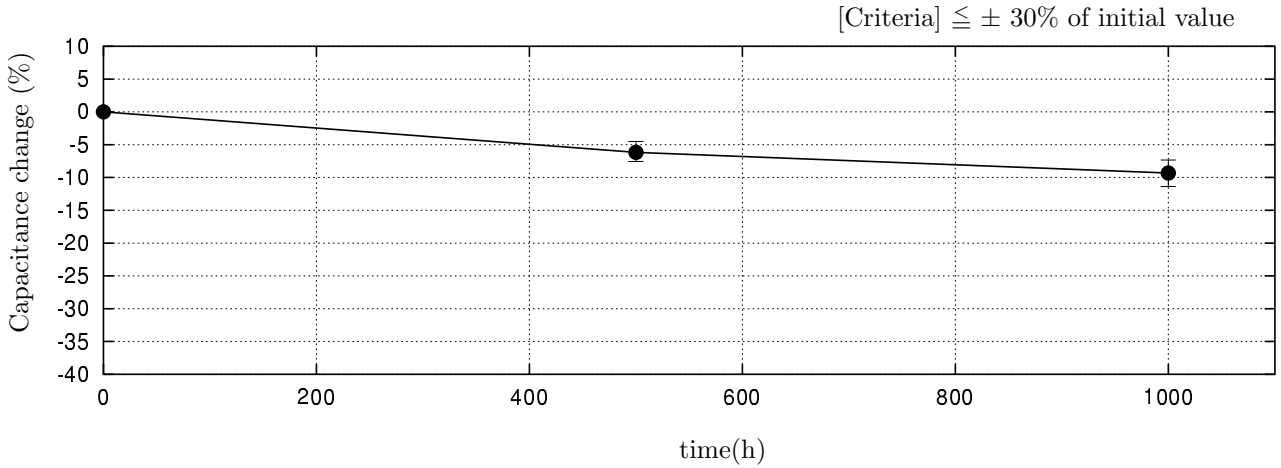
Endurance
Shelf life
Temperature Characteristics
Frequency Characteristics

Item:

EMVE160ADA100MD55G (16V10 μ F, ϕ 4 \times 5.2L)
EMVE160ADA470MF55G (16V47 μ F, ϕ 6.3 \times 5.2L)
EMVE160ADA221MF80G (16V220 μ F, ϕ 6.3 \times 7.7L)
EMVE160ADA471MHA0G (16V470 μ F, ϕ 8 \times 10.0L)
EMVE160ADA681MJA0G (16V680 μ F, ϕ 10 \times 10.0L)
EMVE250ADA100ME55G (25V10 μ F, ϕ 5 \times 5.2L)

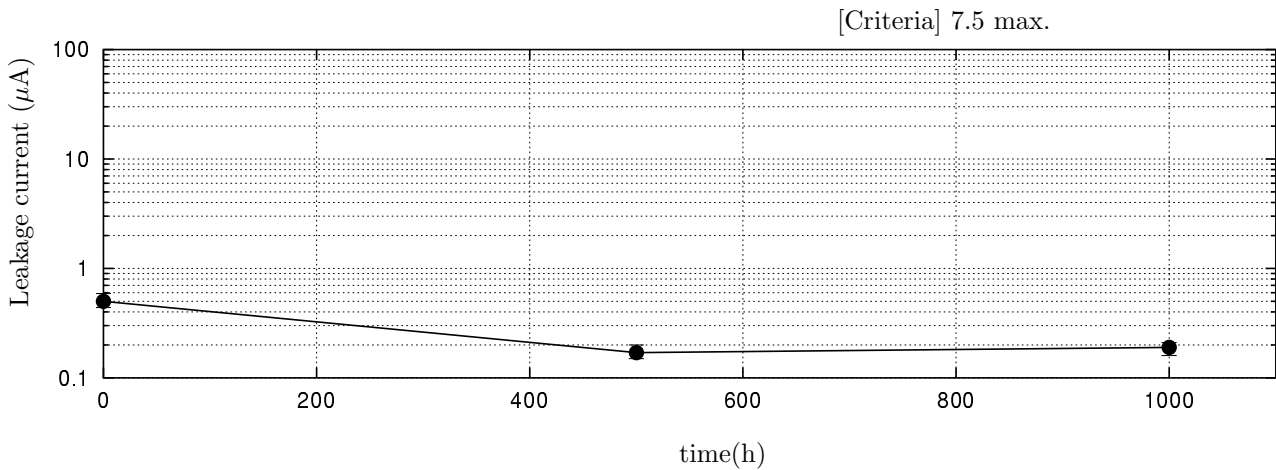
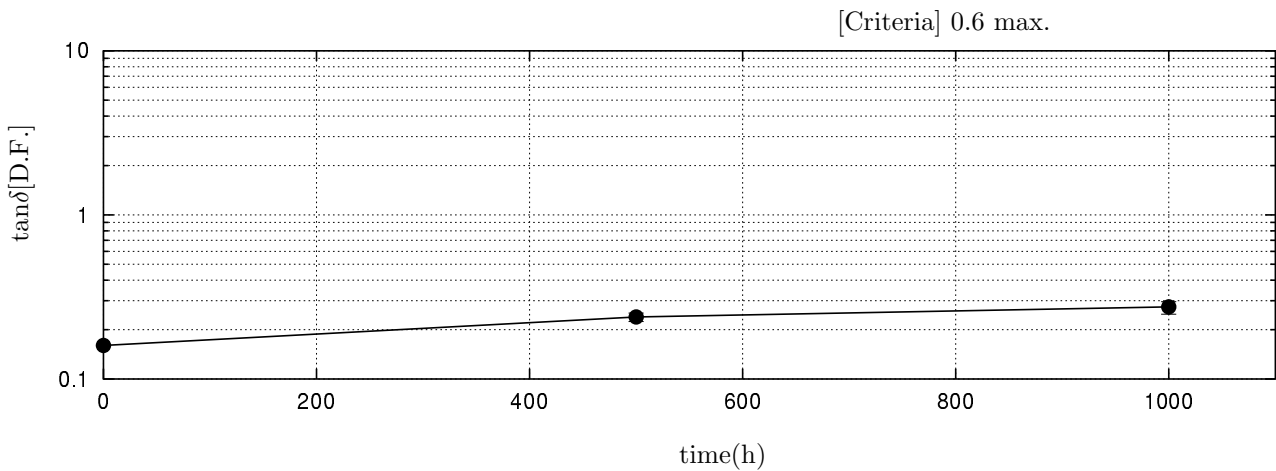
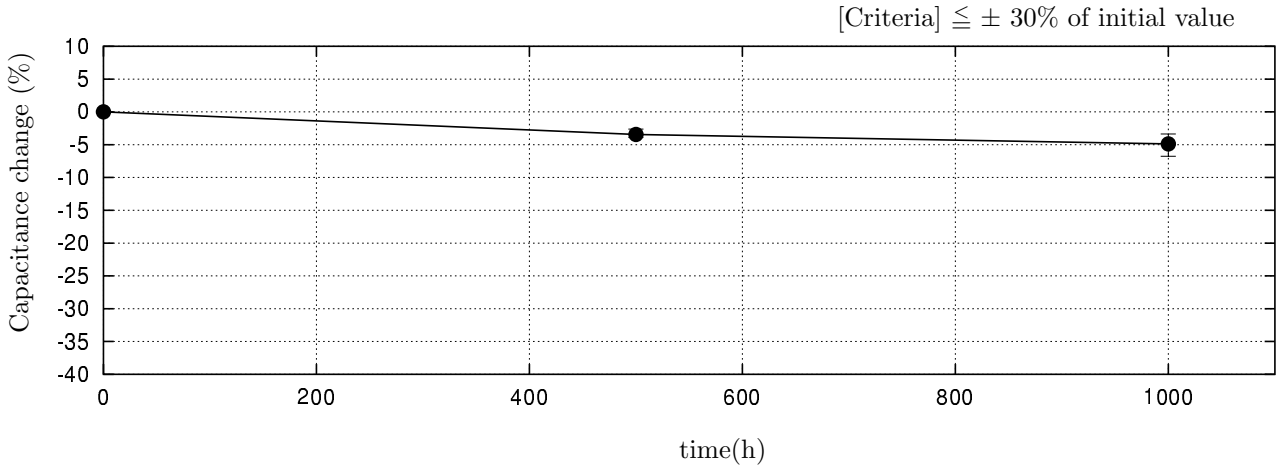
Aluminum Electrolytic Capacitor Reliability data

| Test name | | Endurance | | | |
|-----------------|--------------------|-------------------------|-------------------------|--------------------------|-----------------|
| Test temp. | 105 (°C) | Leakage Current (Volt) | 16 (V) | Measurement LCR meter | 4284A |
| Applied Voltage | 16 (V) | Leakage Current (Time) | 2 (min) | Measurement Freq. | 120 (Hz) |
| Ripple Current | (Arms) | Leakage Current (Temp.) | 20 (°C) | Measurement Temp. | 20 (°C) |
| Ripple freq. | (Hz) | | | Specified Period of Time | 1000 (h) |
| Mark | Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| ● | EMVE160ADA100MD55G | 16 | 10 | φ 4×5.2 L | 20 |



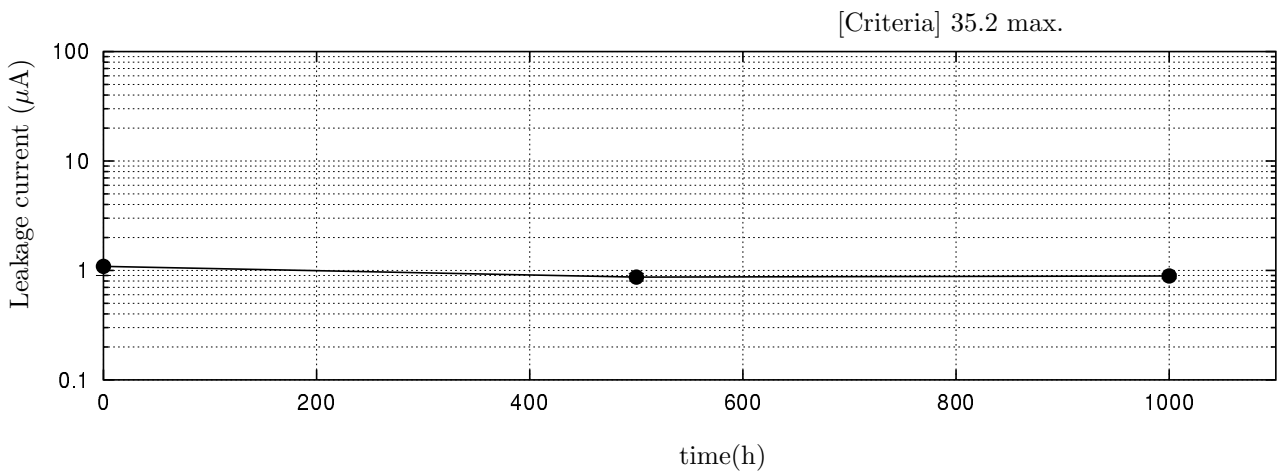
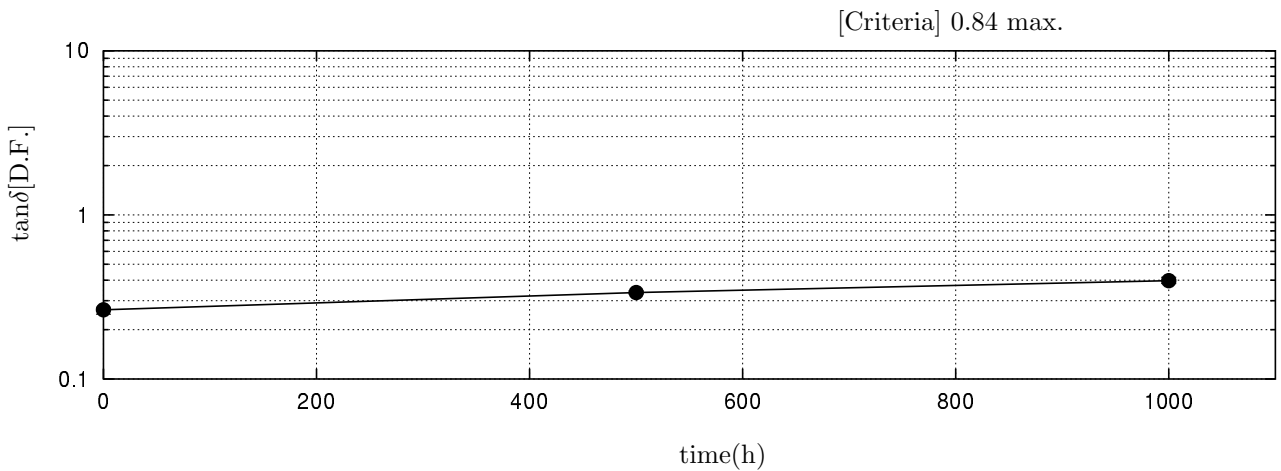
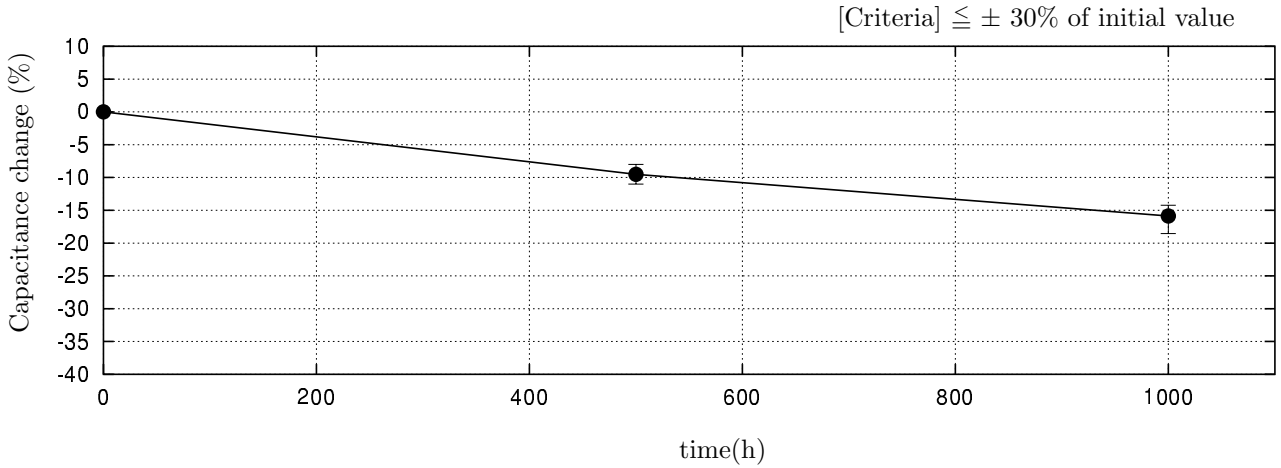
Aluminum Electrolytic Capacitor Reliability data

| Test name | | Endurance | | | |
|-----------------|--------------------|-------------------------|-------------------------|--------------------------|-----------------|
| Test temp. | 105 (°C) | Leakage Current (Volt) | 16 (V) | Measurement LCR meter | 4284A |
| Applied Voltage | 16 (V) | Leakage Current (Time) | 2 (min) | Measurement Freq. | 120 (Hz) |
| Ripple Current | (Arms) | Leakage Current (Temp.) | 20 (°C) | Measurement Temp. | 20 (°C) |
| Ripple freq. | (Hz) | | | Specified Period of Time | 1000 (h) |
| Mark | Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| ● | EMVE160ADA470MF55G | 16 | 47 | φ 6.3×5.2 L | 20 |



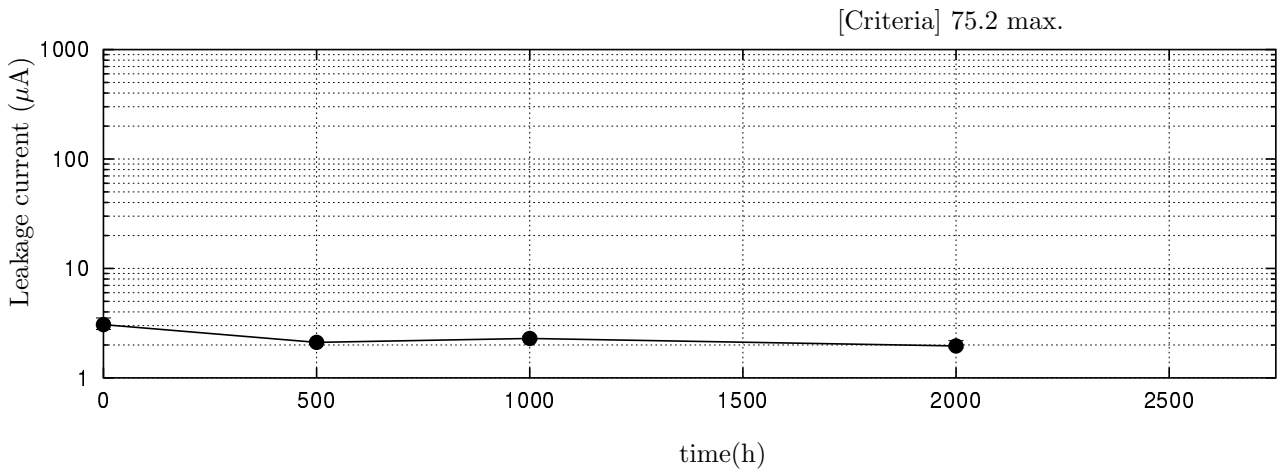
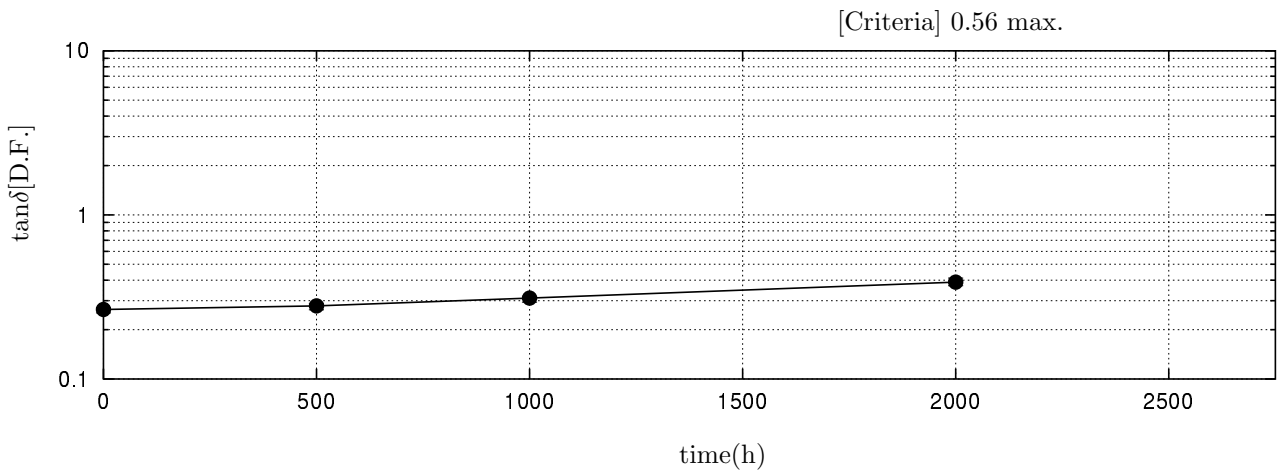
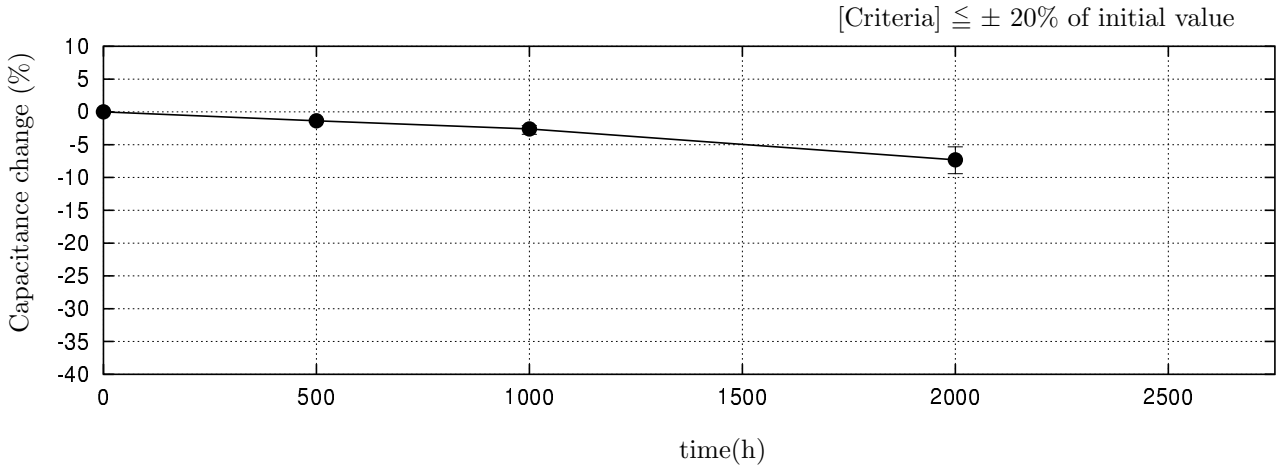
Aluminum Electrolytic Capacitor Reliability data

| Test name | | Endurance | | | |
|-----------------|--------------------|-------------------------|-------------------------|--------------------------|-----------------|
| Test temp. | 105 (°C) | Leakage Current (Volt) | 16 (V) | Measurement LCR meter | 4284A |
| Applied Voltage | 16 (V) | Leakage Current (Time) | 2 (min) | Measurement Freq. | 120 (Hz) |
| Ripple Current | (Arms) | Leakage Current (Temp.) | 20 (°C) | Measurement Temp. | 20 (°C) |
| Ripple freq. | (Hz) | | | Specified Period of Time | 1000 (h) |
| Mark | Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| ● | EMVE160ADA221MF80G | 16 | 220 | φ 6.3×7.7 L | 20 |



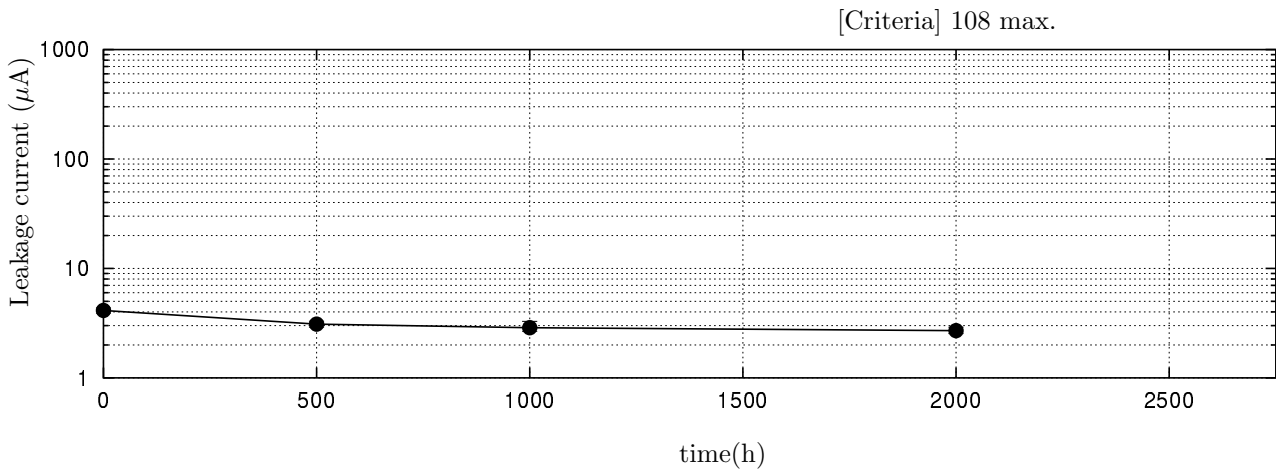
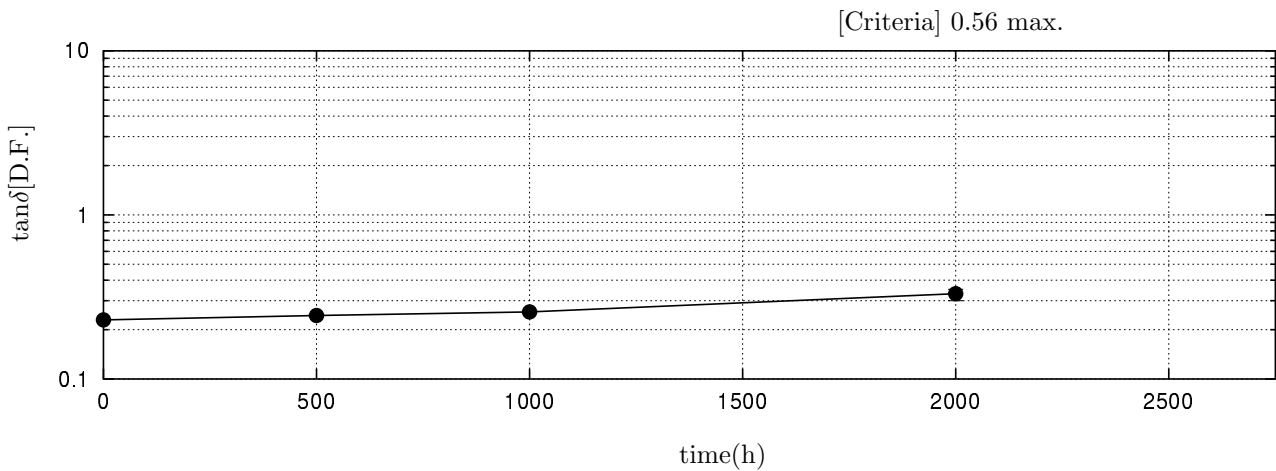
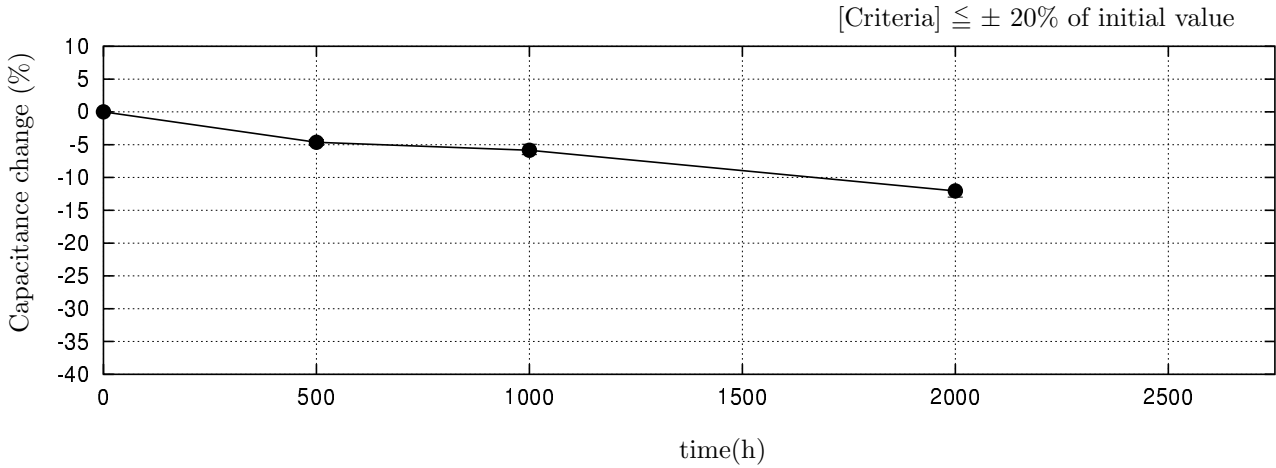
Aluminum Electrolytic Capacitor Reliability data

| Test name | | Endurance | | | |
|-----------------|--------------------|-------------------------|-------------------------|--------------------------|-----------------|
| Test temp. | 105 (°C) | Leakage Current (Volt) | 16 (V) | Measurement LCR meter | 4284A |
| Applied Voltage | 16 (V) | Leakage Current (Time) | 2 (min) | Measurement Freq. | 120 (Hz) |
| Ripple Current | (Arms) | Leakage Current (Temp.) | 20 (°C) | Measurement Temp. | 20 (°C) |
| Ripple freq. | (Hz) | | | Specified Period of Time | 2000 (h) |
| Mark | Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| ● | EMVE160ADA471MHA0G | 16 | 470 | φ 8×10.0 L | 20 |



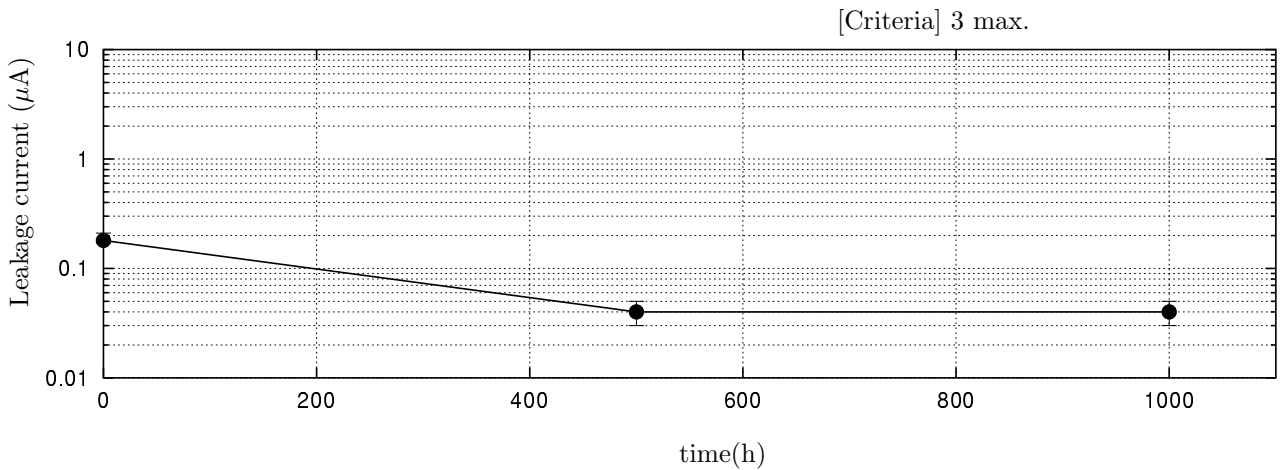
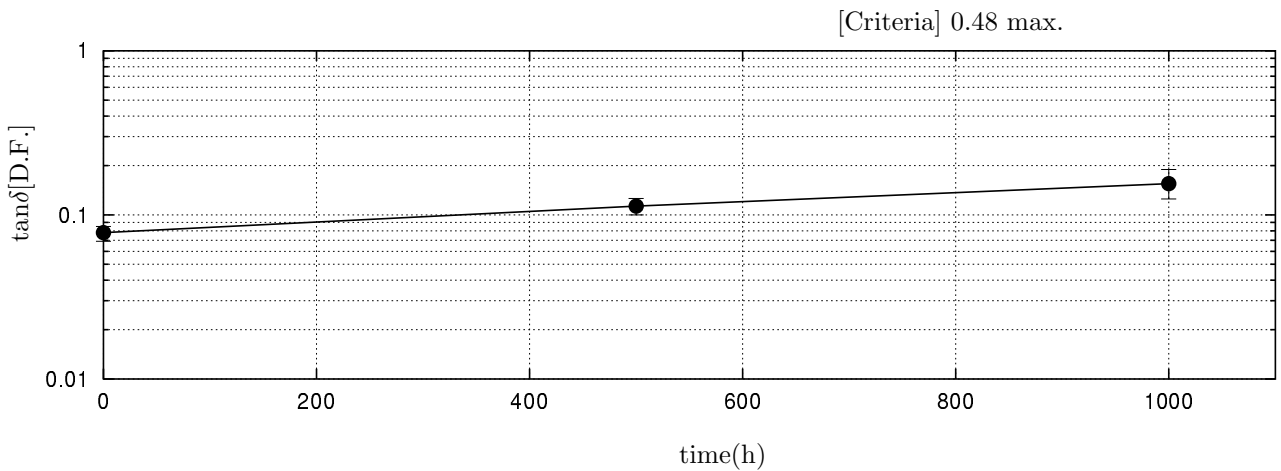
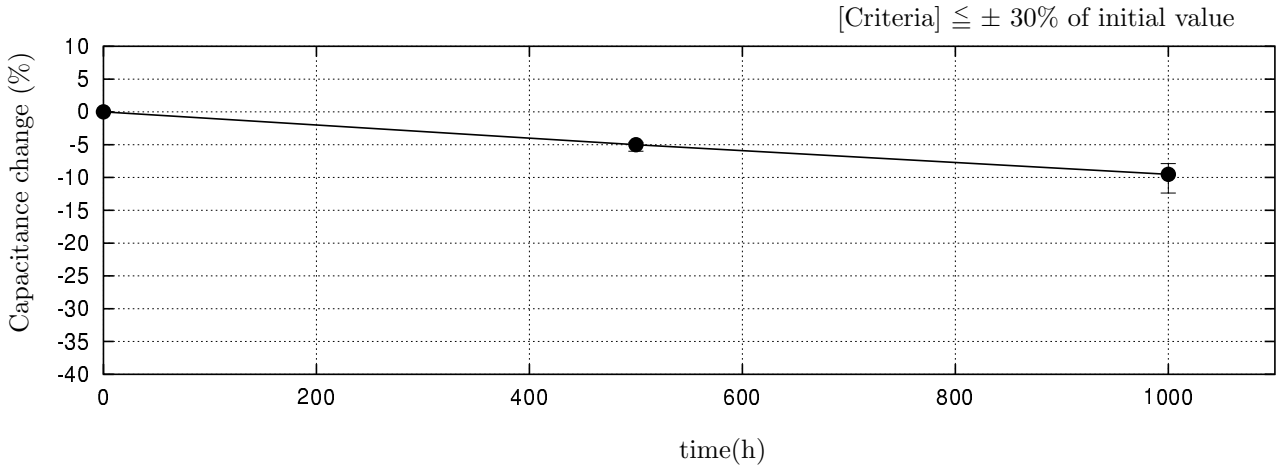
Aluminum Electrolytic Capacitor Reliability data

| Test name | | Endurance | | | |
|-----------------|--------------------|-------------------------|-------------------------|--------------------------|-----------------|
| Test temp. | 105 (°C) | Leakage Current (Volt) | 16 (V) | Measurement LCR meter | 4284A |
| Applied Voltage | 16 (V) | Leakage Current (Time) | 2 (min) | Measurement Freq. | 120 (Hz) |
| Ripple Current | (Arms) | Leakage Current (Temp.) | 20 (°C) | Measurement Temp. | 20 (°C) |
| Ripple freq. | (Hz) | | | Specified Period of Time | 2000 (h) |
| Mark | Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| ● | EMVE160ADA681MJA0G | 16 | 680 | φ 10×10.0 L | 20 |



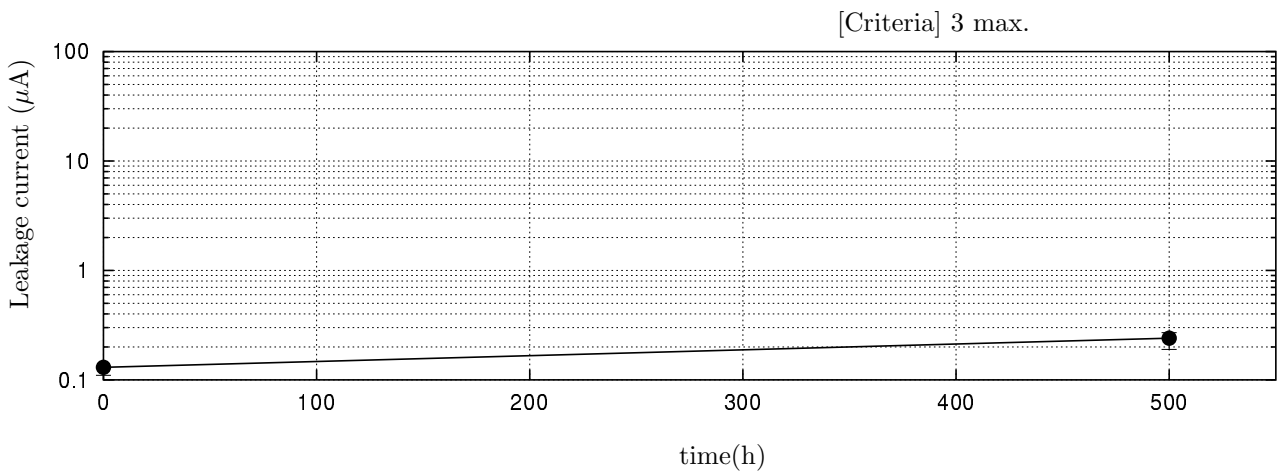
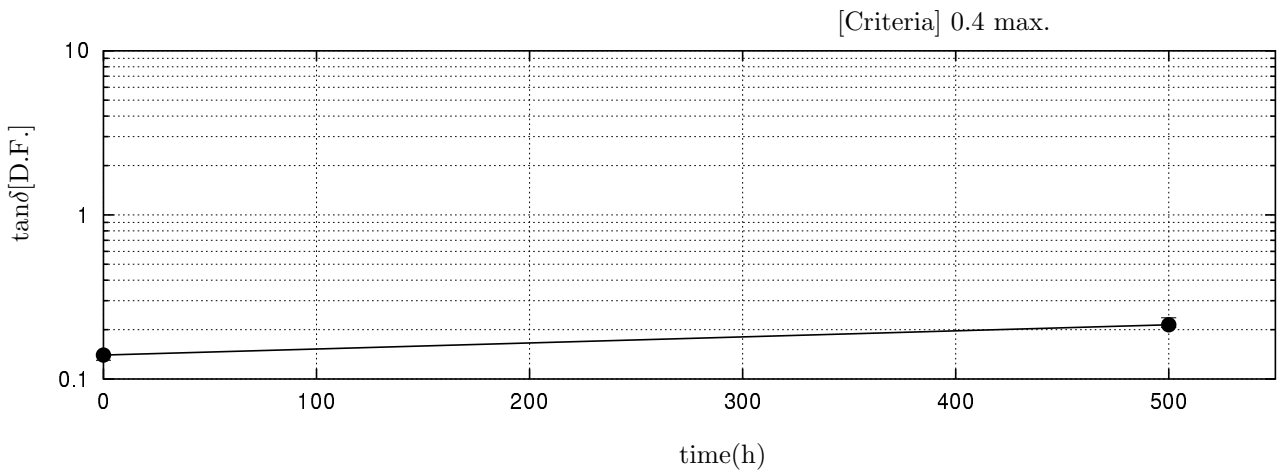
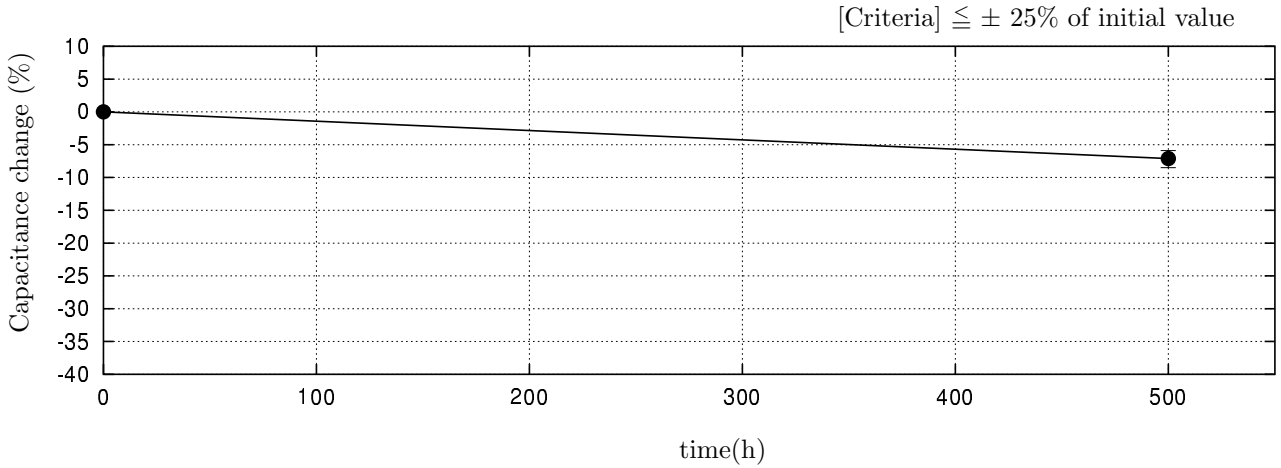
Aluminum Electrolytic Capacitor Reliability data

| Test name | | Endurance | | | |
|-----------------|--------------------|-------------------------|-------------------------|--------------------------|-----------------|
| Test temp. | 105 (°C) | Leakage Current (Volt) | 25 (V) | Measurement LCR meter | 4284A |
| Applied Voltage | 25 (V) | Leakage Current (Time) | 2 (min) | Measurement Freq. | 120 (Hz) |
| Ripple Current | (Arms) | Leakage Current (Temp.) | 20 (°C) | Measurement Temp. | 20 (°C) |
| Ripple freq. | (Hz) | | | Specified Period of Time | 1000 (h) |
| Mark | Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| ● | EMVE250ADA100ME55G | 25 | 10 | φ 5×5.2 L | 20 |



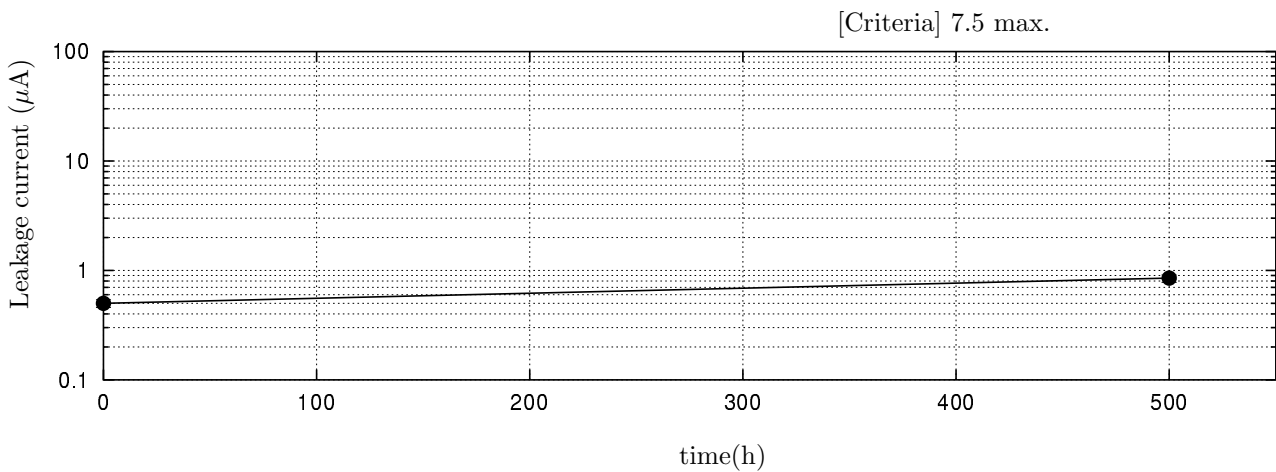
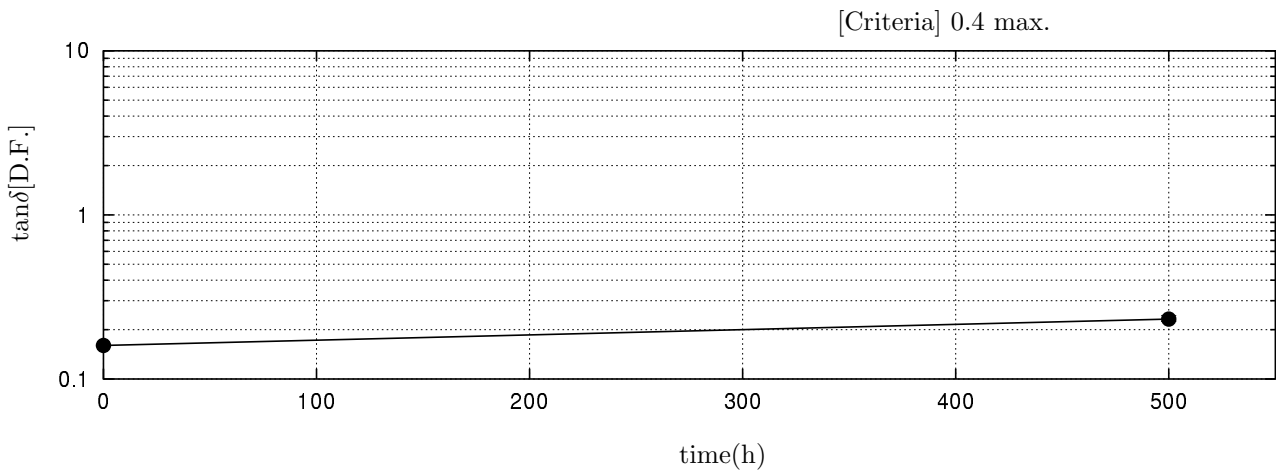
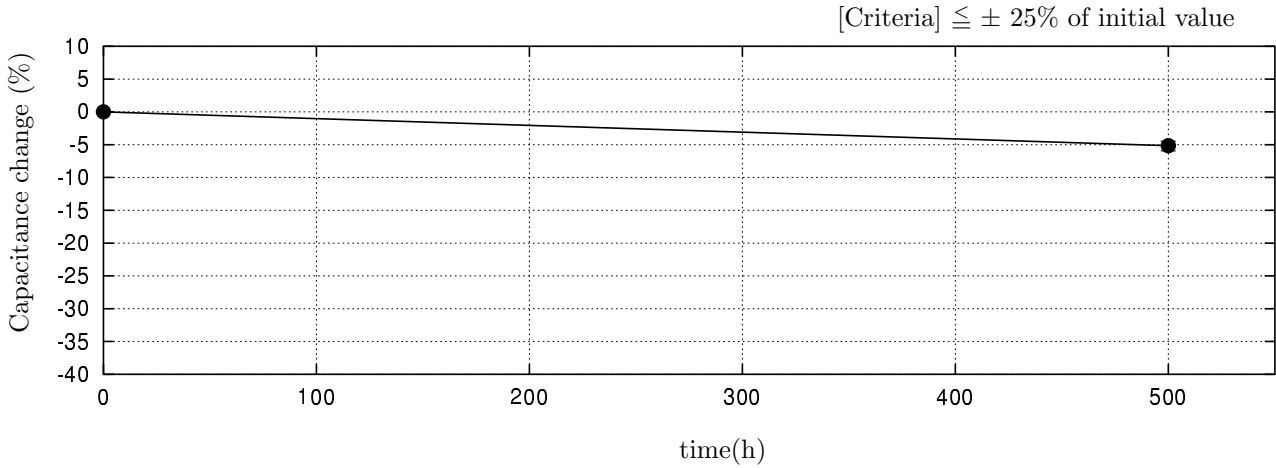
Aluminum Electrolytic Capacitor Reliability data

| Test name | | Shelf life | | | |
|-----------------|--------------------|-------------------------|-------------------------|--------------------------|-----------------|
| Test temp. | 105 (°C) | Leakage Current (Volt) | 16 (V) | Measurement LCR meter | 4284A |
| Applied Voltage | (V) | Leakage Current (Time) | 2 (min) | Measurement Freq. | 120 (Hz) |
| Ripple Current | (Arms) | Leakage Current (Temp.) | 20 (°C) | Measurement Temp. | 20 (°C) |
| Ripple freq. | (Hz) | | | Specified Period of Time | 500 (h) |
| Mark | Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| ● | EMVE160ADA100MD55G | 16 | 10 | φ 4×5.2 L | 10 |



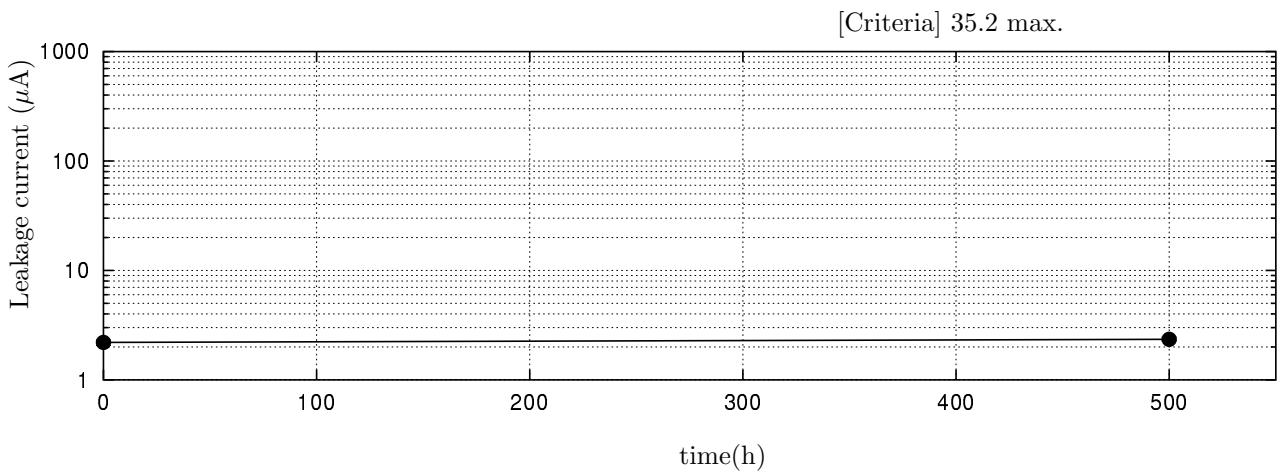
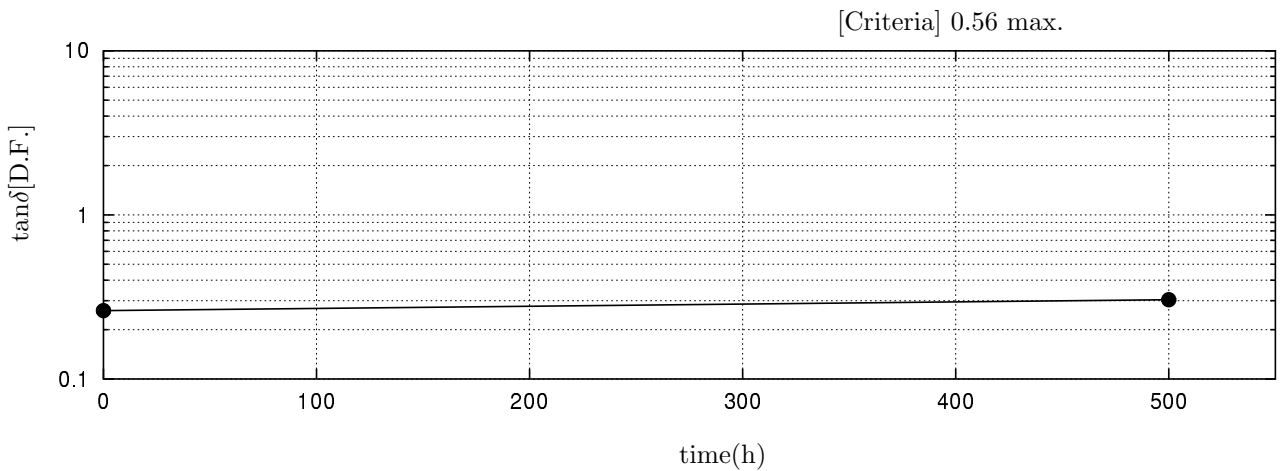
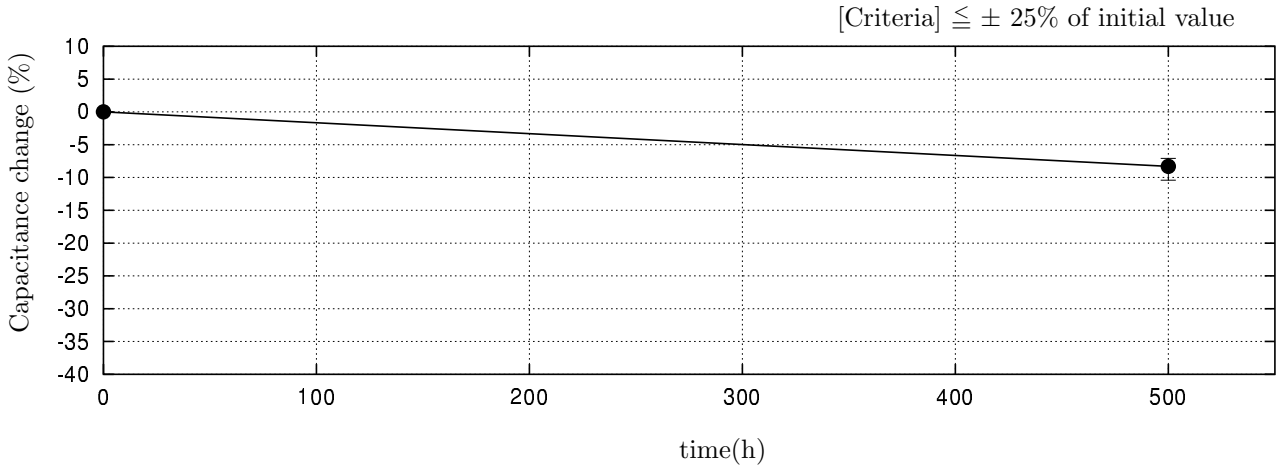
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|-----------------|--------------------|-------------------------|-------------------------|--------------------------|-----------------|
| Test temp. | 105 (°C) | Leakage Current (Volt) | 16 (V) | Measurement LCR meter | 4284A |
| Applied Voltage | (V) | Leakage Current (Time) | 2 (min) | Measurement Freq. | 120 (Hz) |
| Ripple Current | (Arms) | Leakage Current (Temp.) | 20 (°C) | Measurement Temp. | 20 (°C) |
| Ripple freq. | (Hz) | | | Specified Period of Time | 500 (h) |
| Mark | Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| ● | EMVE160ADA470MF55G | 16 | 47 | φ 6.3×5.2 L | 10 |



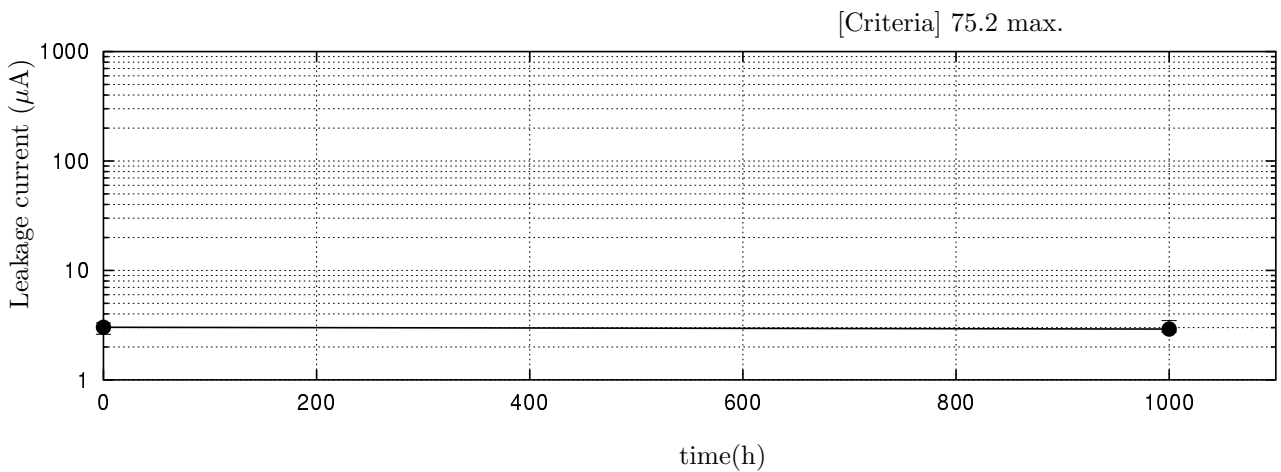
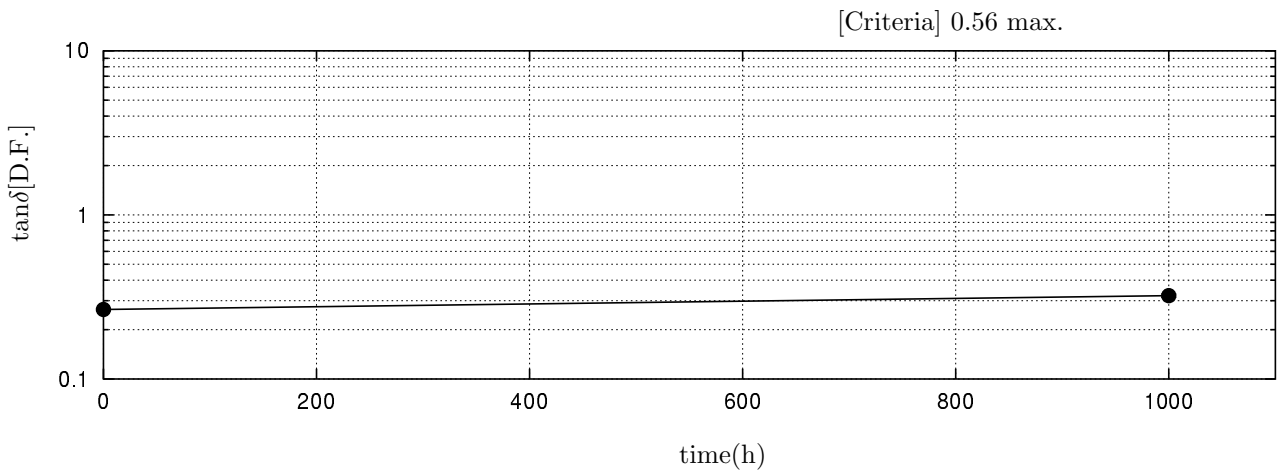
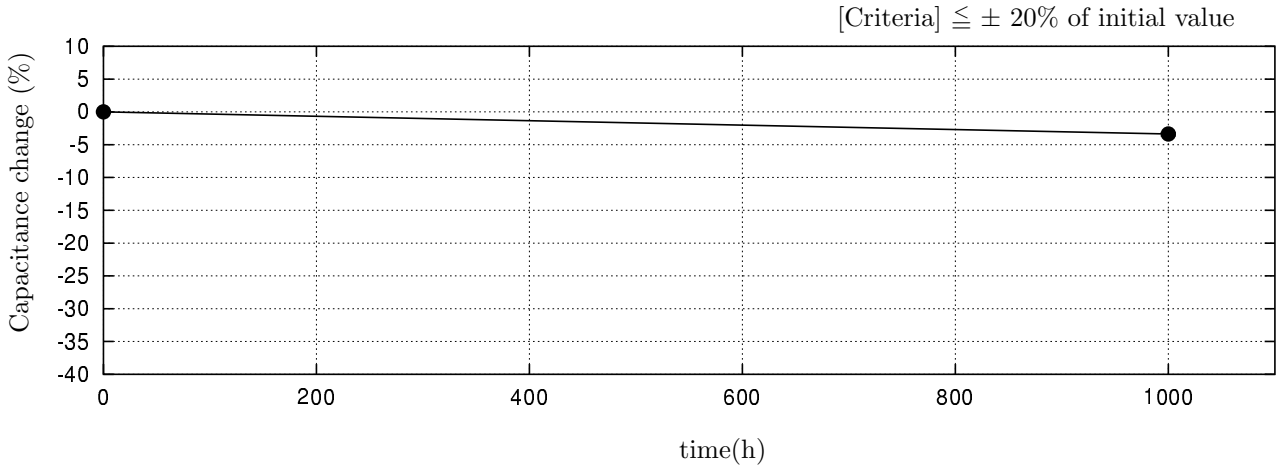
Aluminum Electrolytic Capacitor Reliability data

| Test name | | Shelf life | | | |
|-----------------|--------------------|-------------------------|-------------------------|--------------------------|-----------------|
| Test temp. | 105 (°C) | Leakage Current (Volt) | 16 (V) | Measurement LCR meter | 4284A |
| Applied Voltage | (V) | Leakage Current (Time) | 2 (min) | Measurement Freq. | 120 (Hz) |
| Ripple Current | (Arms) | Leakage Current (Temp.) | 20 (°C) | Measurement Temp. | 20 (°C) |
| Ripple freq. | (Hz) | | | Specified Period of Time | 500 (h) |
| Mark | Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| ● | EMVE160ADA221MF80G | 16 | 220 | φ 6.3×7.7 L | 10 |



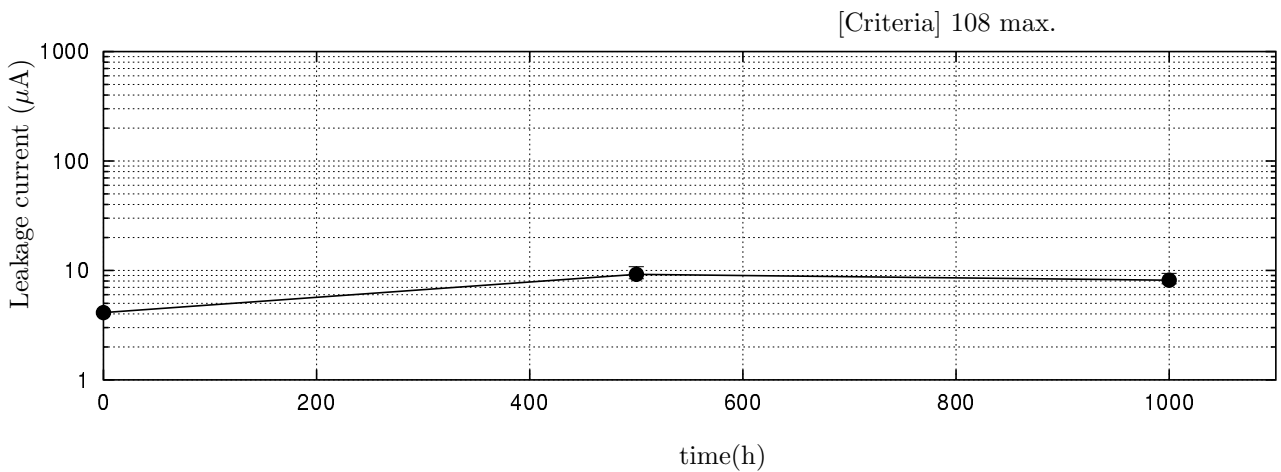
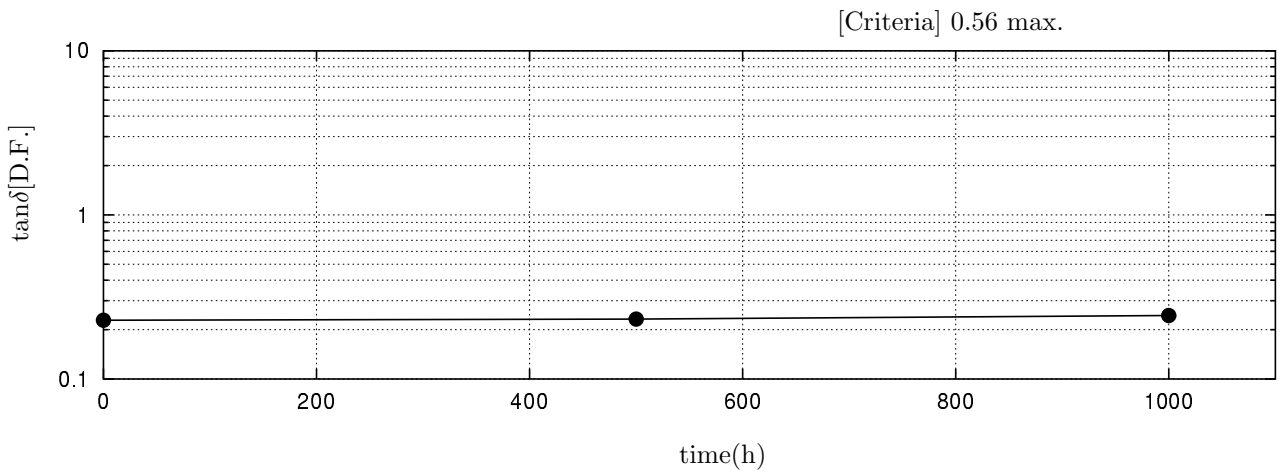
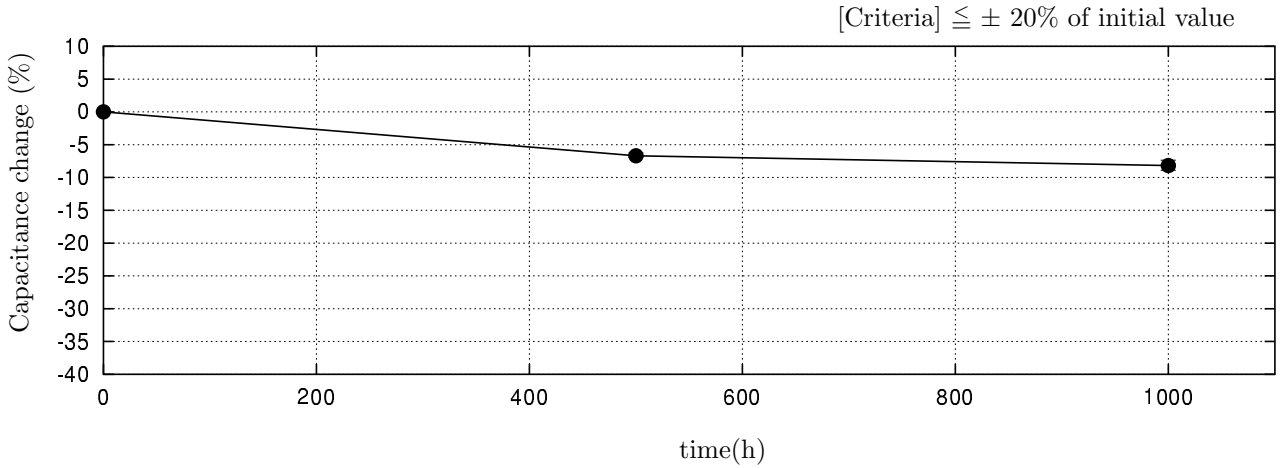
Aluminum Electrolytic Capacitor Reliability data

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|-----------------|--------------------|-------------------------|-------------------------|--------------------------|-----------------|
| Test temp. | 105 (°C) | Leakage Current (Volt) | 16 (V) | Measurement LCR meter | 4284A |
| Applied Voltage | (V) | Leakage Current (Time) | 2 (min) | Measurement Freq. | 120 (Hz) |
| Ripple Current | (Arms) | Leakage Current (Temp.) | 20 (°C) | Measurement Temp. | 20 (°C) |
| Ripple freq. | (Hz) | | | Specified Period of Time | 1000 (h) |
| Mark | Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| ● | EMVE160ADA471MHA0G | 16 | 470 | φ 8×10.0 L | 10 |



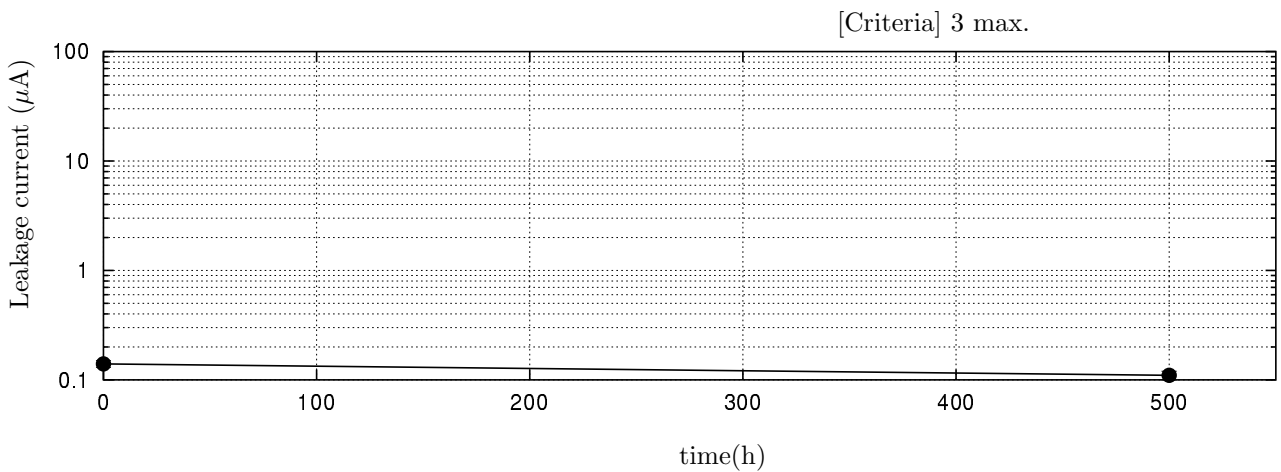
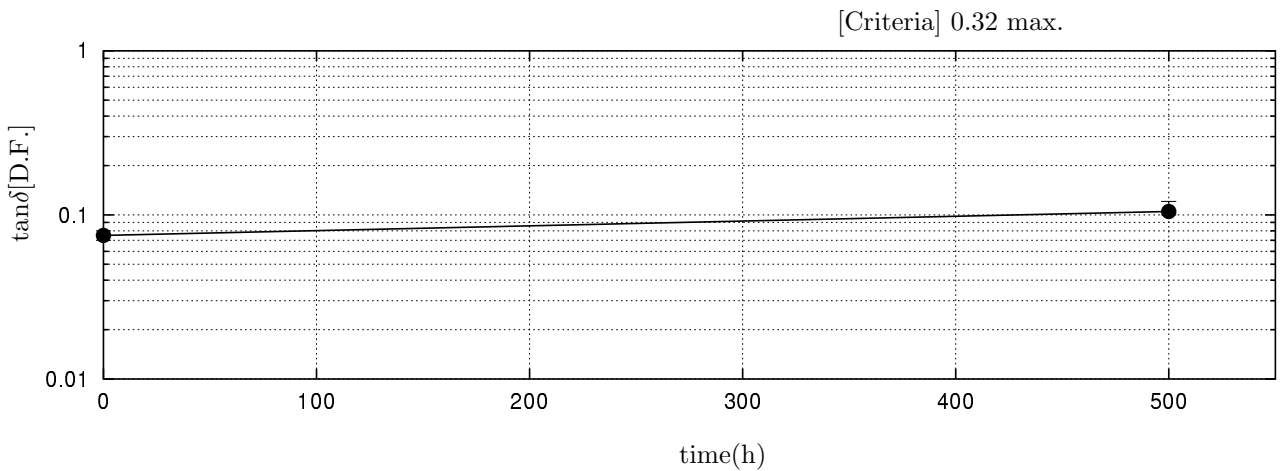
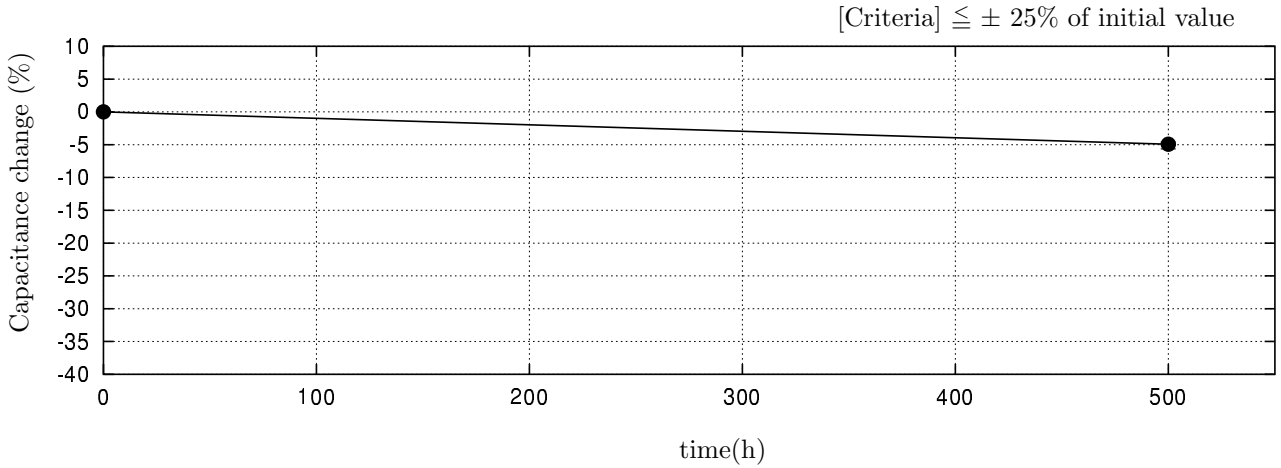
Aluminum Electrolytic Capacitor Reliability data

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|-----------------|--------------------|-------------------------|-------------------------|--------------------------|-----------------|
| Test temp. | 105 (°C) | Leakage Current (Volt) | 16 (V) | Measurement LCR meter | 4284A |
| Applied Voltage | (V) | Leakage Current (Time) | 2 (min) | Measurement Freq. | 120 (Hz) |
| Ripple Current | (Arms) | Leakage Current (Temp.) | 20 (°C) | Measurement Temp. | 20 (°C) |
| Ripple freq. | (Hz) | | | Specified Period of Time | 1000 (h) |
| Mark | Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| ● | EMVE160ADA681MJA0G | 16 | 680 | φ 10×10.0 L | 10 |



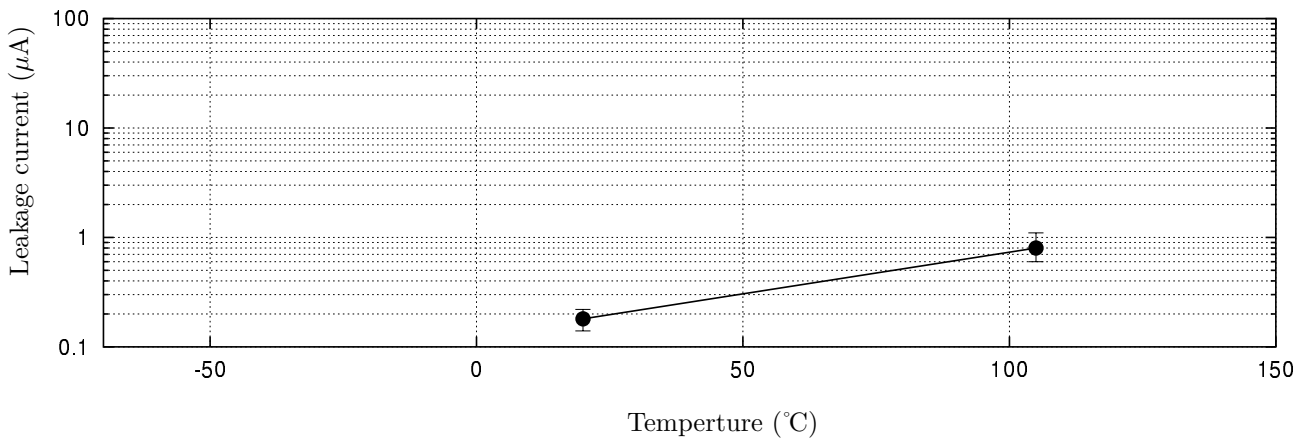
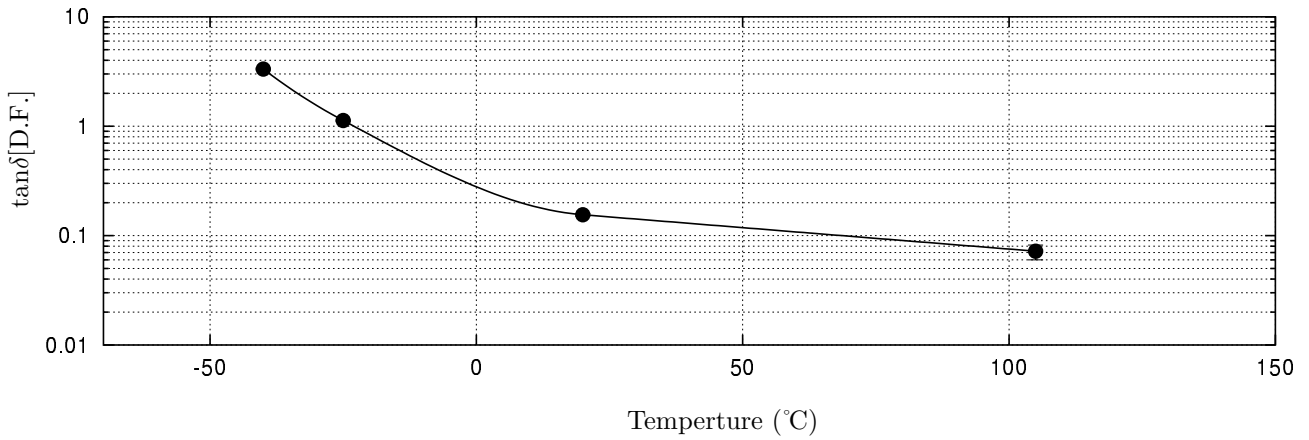
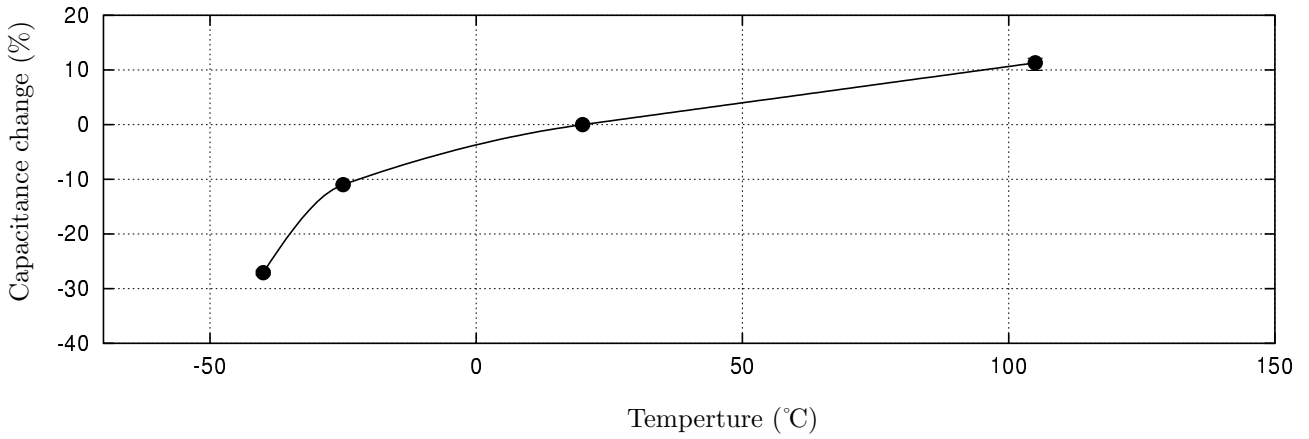
Aluminum Electrolytic Capacitor Reliability data

| Test name | | Shelf life | | | |
|-----------------|--------------------|-------------------------|-------------------------|--------------------------|-----------------|
| Test temp. | 105 (°C) | Leakage Current (Volt) | 25 (V) | Measurement LCR meter | 4284A |
| Applied Voltage | (V) | Leakage Current (Time) | 2 (min) | Measurement Freq. | 120 (Hz) |
| Ripple Current | (Arms) | Leakage Current (Temp.) | 20 (°C) | Measurement Temp. | 20 (°C) |
| Ripple freq. | (Hz) | | | Specified Period of Time | 500 (h) |
| Mark | Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| ● | EMVE250ADA100ME55G | 25 | 10 | φ 5×5.2 L | 10 |



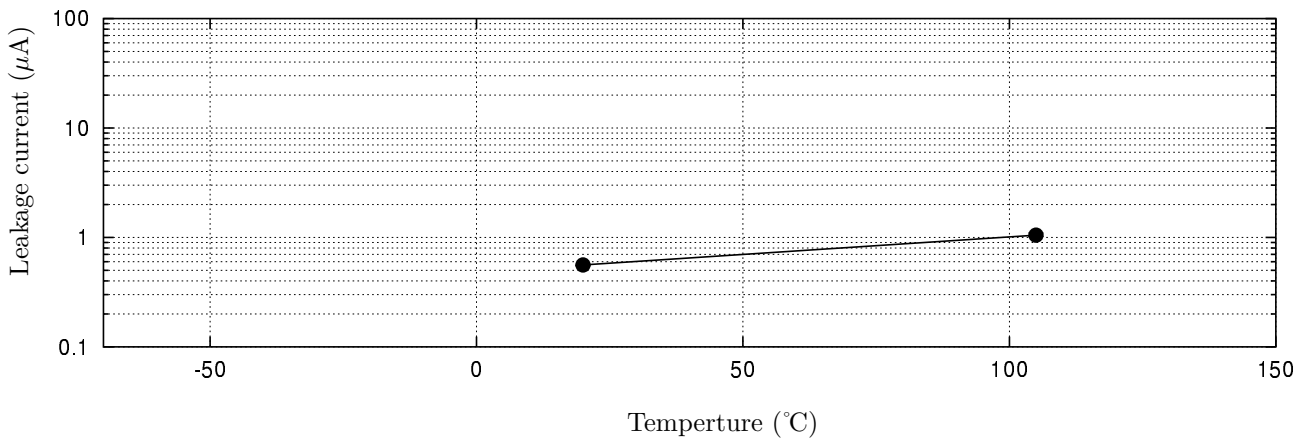
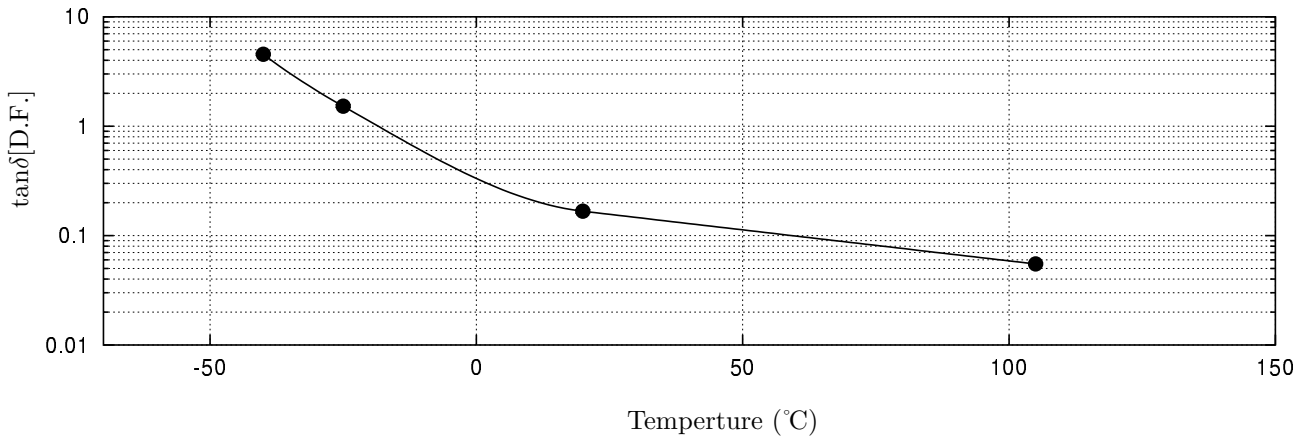
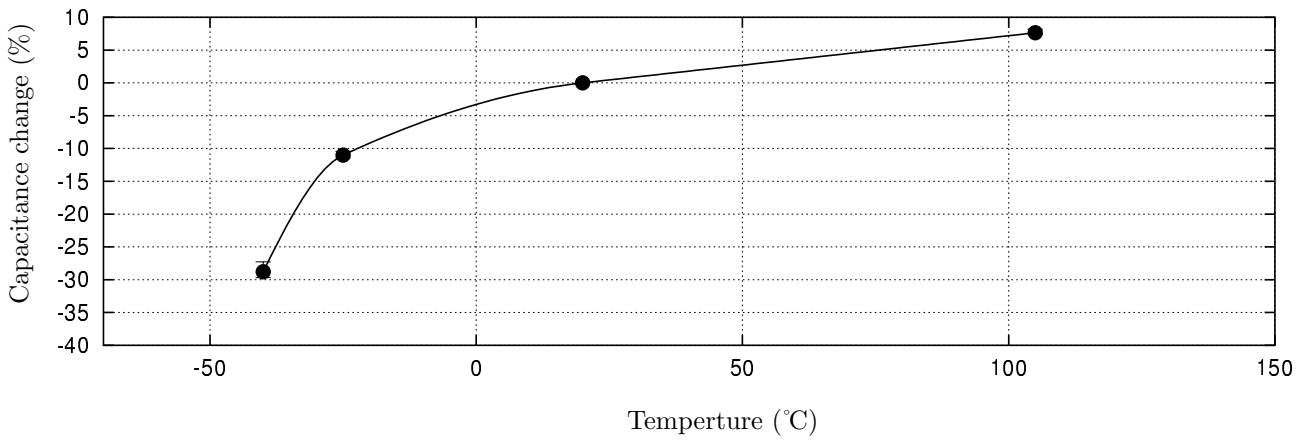
Aluminum Electrolytic Capacitor Reliability data

| Test name | | Temperature Characteristics | | | |
|------------|--------------------|-----------------------------|-------------------------|-----------------------|-----------------|
| Test temp. | -40 ~ 105 (°C) | Leakage Current (Volt) | 16 (V) | Measurement LCR meter | 4284A |
| | | Leakage Current (Time) | 2 (min) | Measurement Freq. | 120 (Hz) |
| Mark | Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| ● | EMVE160ADA100MD55G | 16 | 10 | φ 4×5.2 L | 3 |



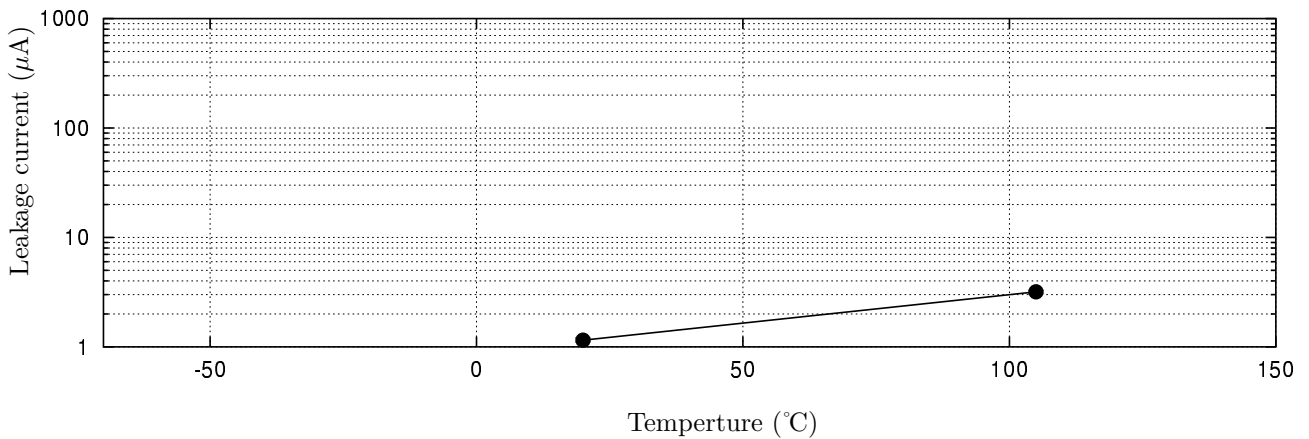
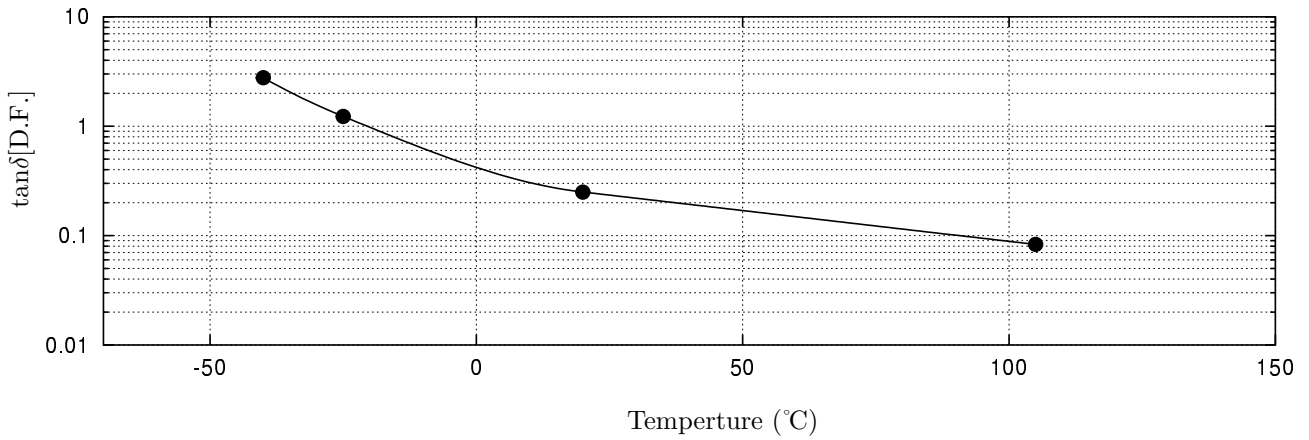
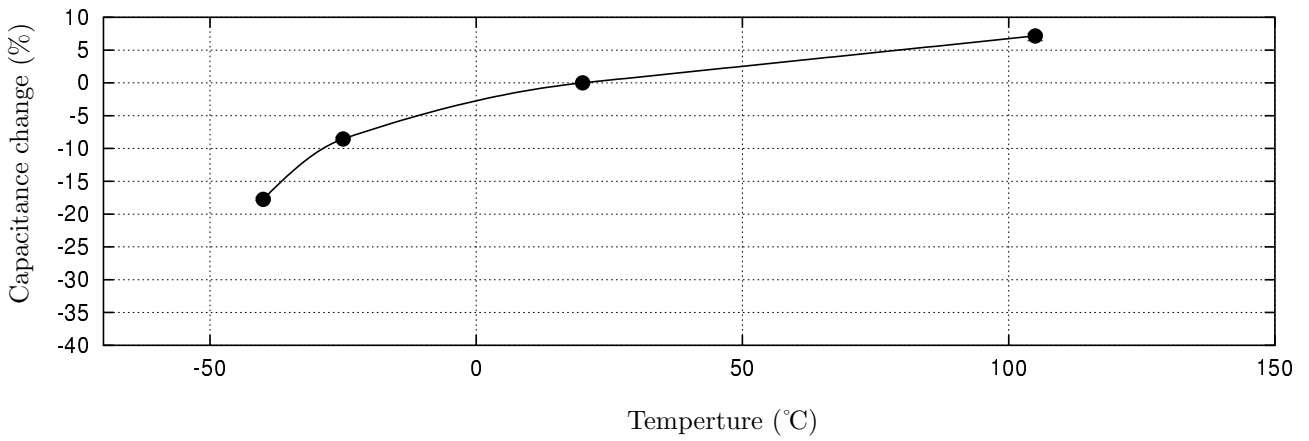
Aluminum Electrolytic Capacitor Reliability data

| Test name | | | | | |
|------------------------------------|--------------------|------------------------|-------------------------|-----------------------|-----------------|
| Temperature Characteristics | | | | | |
| Test temp. | -40 ~ 105 (°C) | Leakage Current (Volt) | 16 (V) | Measurement LCR meter | 4284A |
| | | Leakage Current (Time) | 2 (min) | Measurement Freq. | 120 (Hz) |
| Mark | Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| ● | EMVE160ADA470MF55G | 16 | 47 | φ 6.3×5.2 L | 3 |



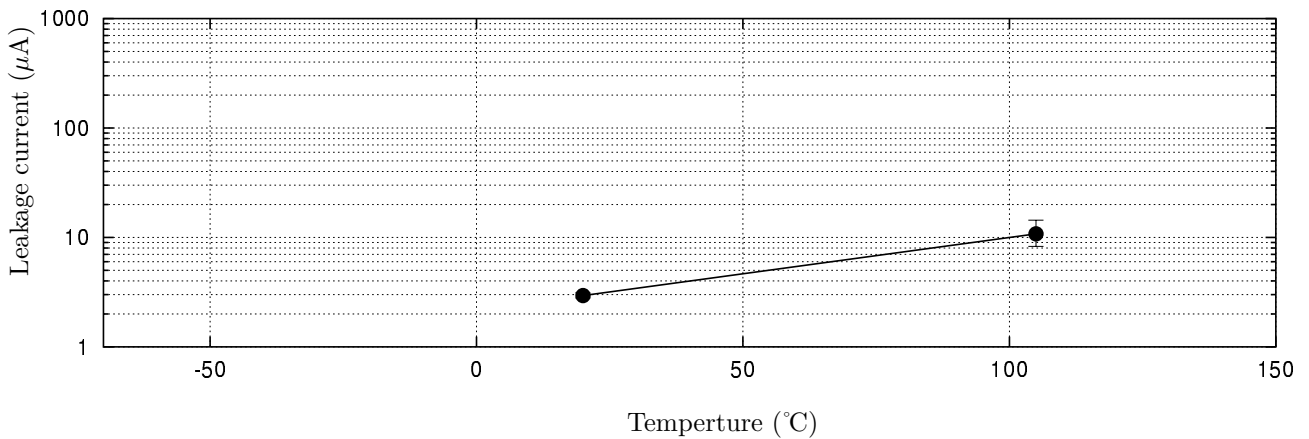
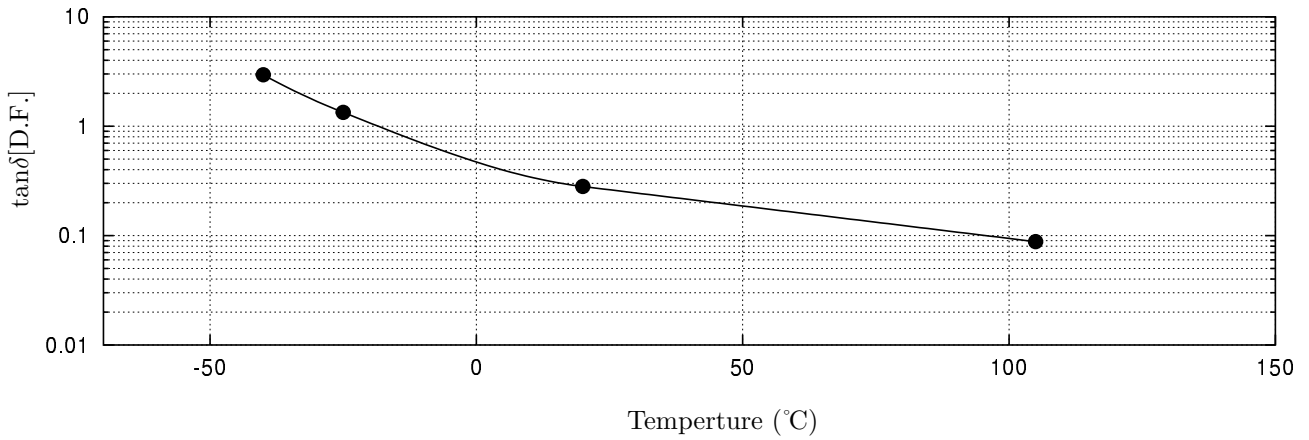
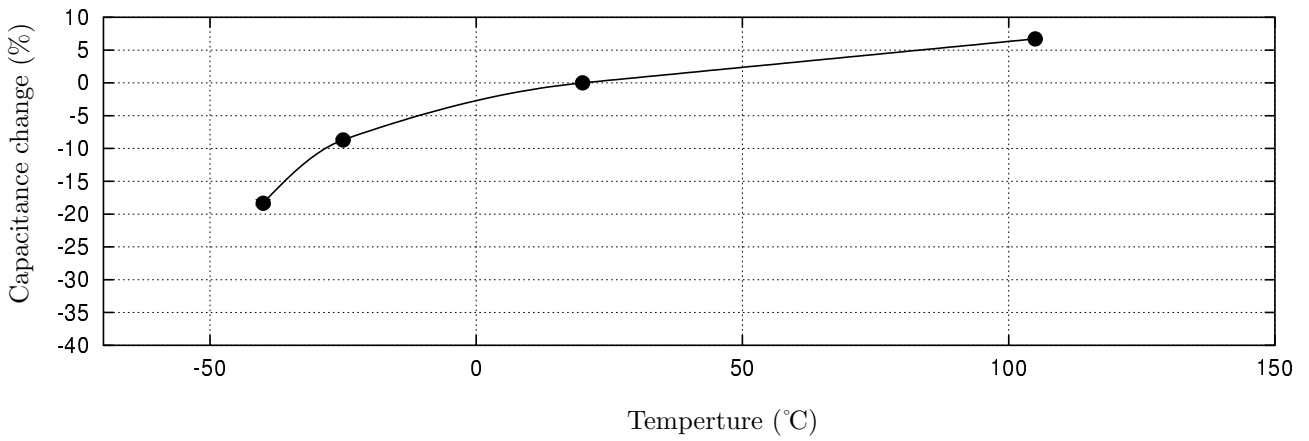
Aluminum Electrolytic Capacitor Reliability data

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|------------------------------------|--------------------|------------------------|-------------------------|-----------------------|-----------------|
| Temperature Characteristics | | | | | |
| Test temp. | -40 ~ 105 (°C) | Leakage Current (Volt) | 16 (V) | Measurement LCR meter | 4284A |
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| Mark | Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| ● | EMVE160ADA221MF80G | 16 | 220 | φ 6.3×7.7 L | 3 |



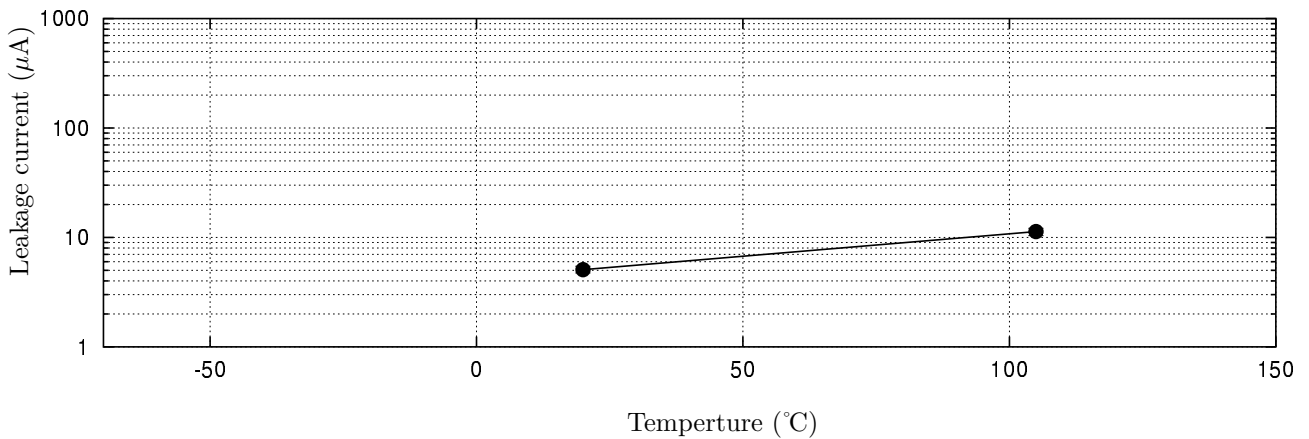
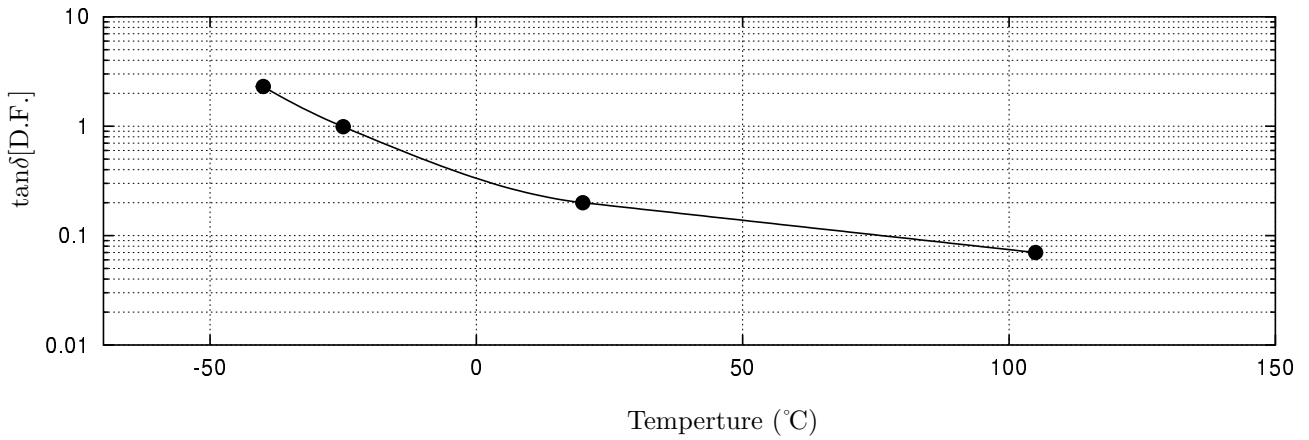
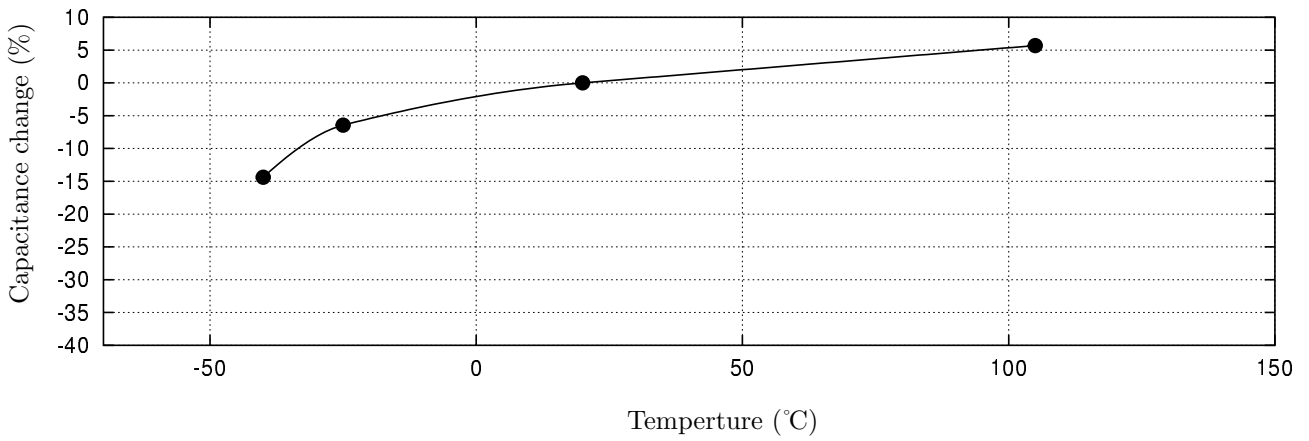
Aluminum Electrolytic Capacitor Reliability data

| Test name | | | | | |
|------------------------------------|--------------------|------------------------|-------------------------|-----------------------|-----------------|
| Temperature Characteristics | | | | | |
| Test temp. | -40 ~ 105 (°C) | Leakage Current (Volt) | 16 (V) | Measurement LCR meter | 4284A |
| | | Leakage Current (Time) | 2 (min) | Measurement Freq. | 120 (Hz) |
| Mark | Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| ● | EMVE160ADA471MHA0G | 16 | 470 | φ 8×10.0 L | 3 |



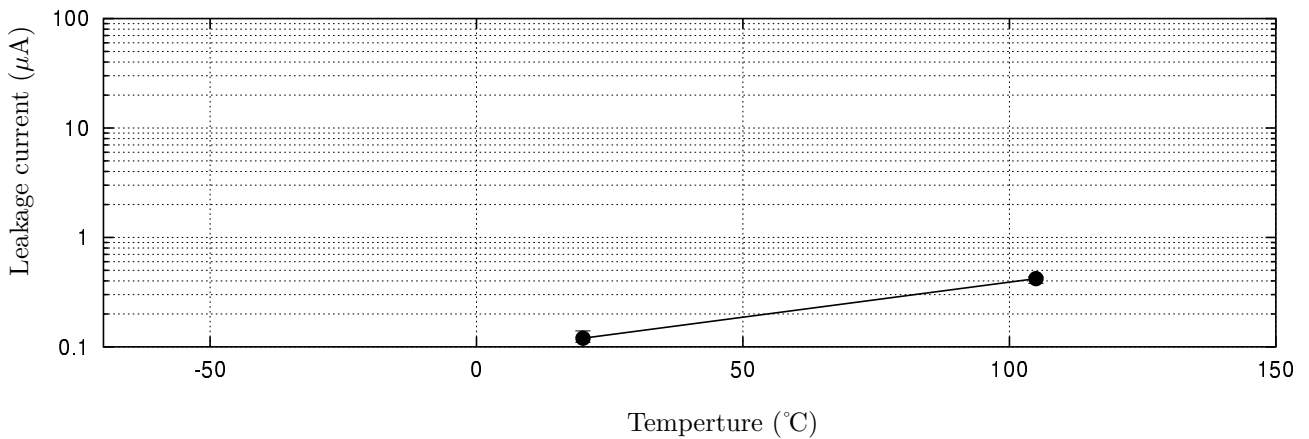
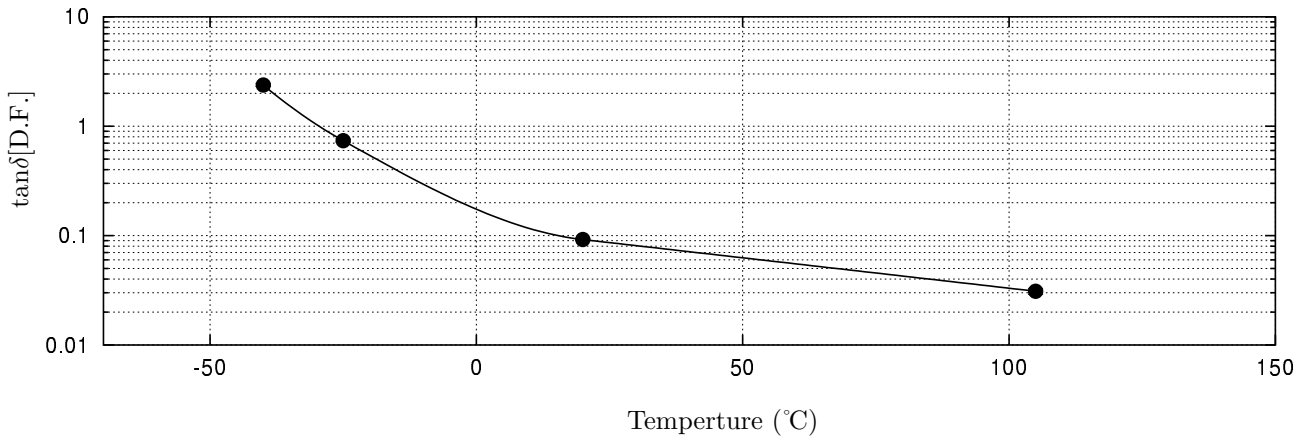
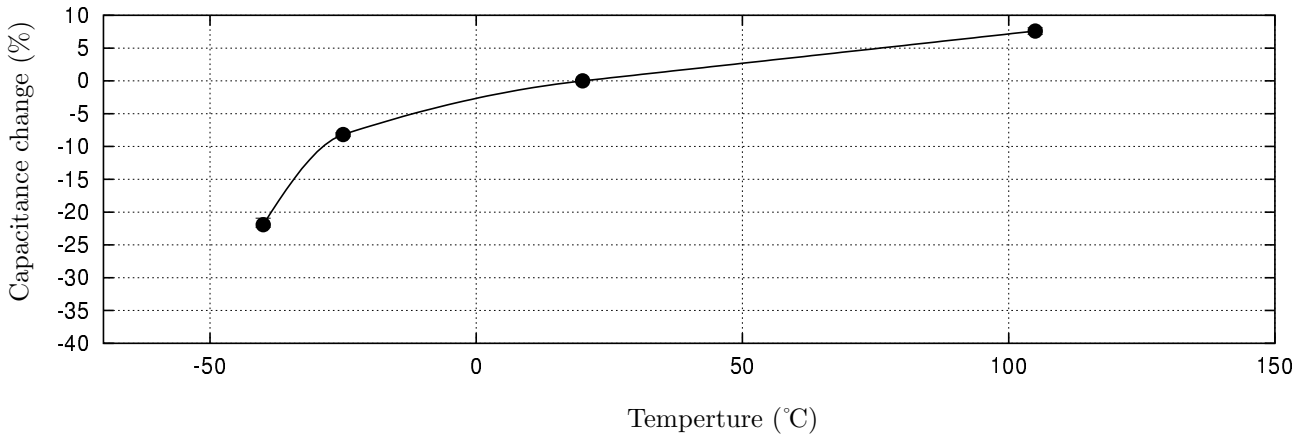
Aluminum Electrolytic Capacitor Reliability data

| Test name | | | | | |
|------------------------------------|--------------------|------------------------|-------------------------|-----------------------|-----------------|
| Temperature Characteristics | | | | | |
| Test temp. | -40 ~ 105 (°C) | Leakage Current (Volt) | 16 (V) | Measurement LCR meter | 4284A |
| | | Leakage Current (Time) | 2 (min) | Measurement Freq. | 120 (Hz) |
| Mark | Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| ● | EMVE160ADA681MJA0G | 16 | 680 | φ 10×10.0 L | 3 |



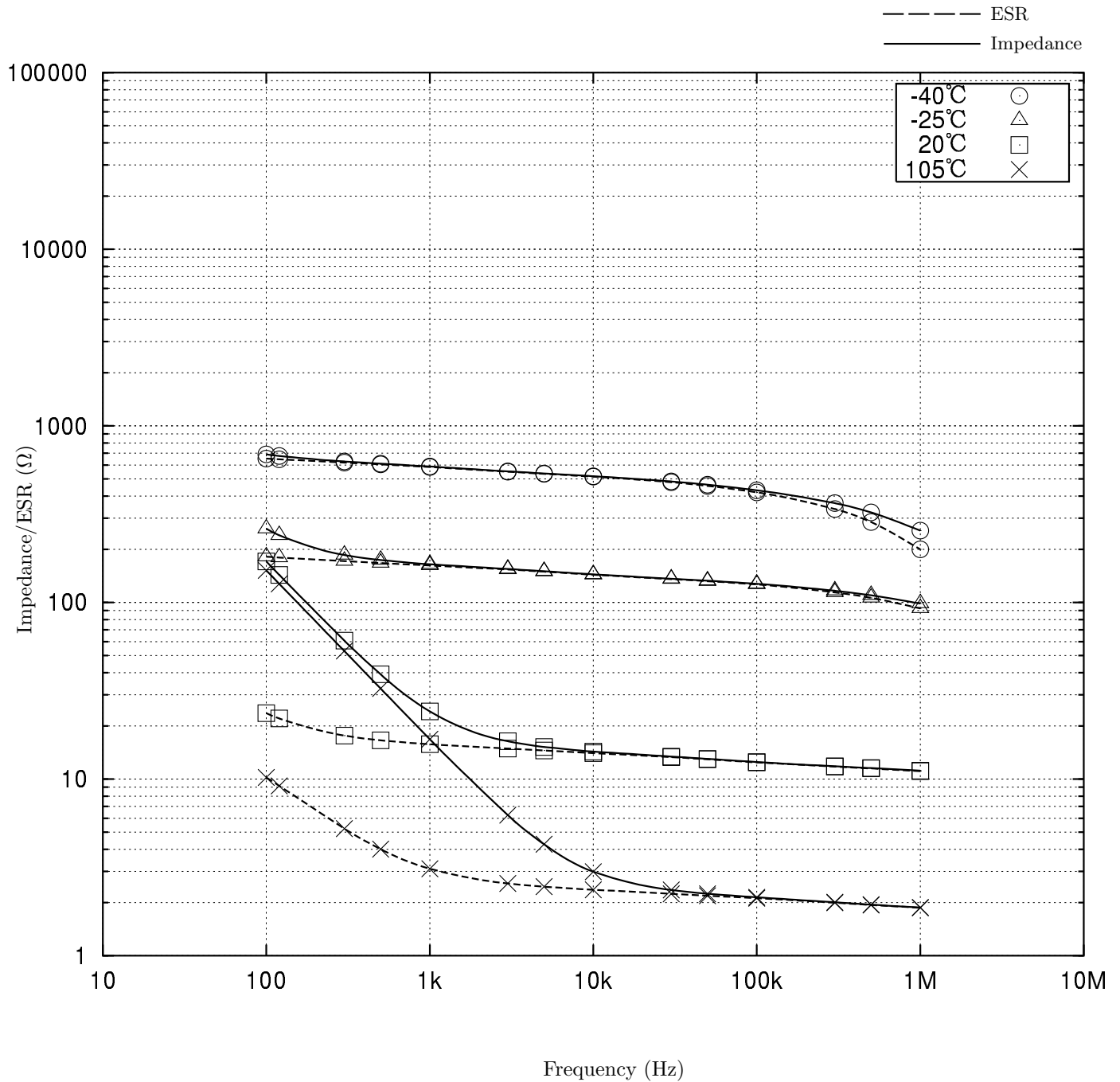
Aluminum Electrolytic Capacitor Reliability data

| Test name | | Temperature Characteristics | | | |
|------------|--------------------|-----------------------------|-------------------------|-----------------------|-----------------|
| Test temp. | -40 ~ 105 (°C) | Leakage Current (Volt) | 25 (V) | Measurement LCR meter | 4284A |
| | | Leakage Current (Time) | 2 (min) | Measurement Freq. | 120 (Hz) |
| Mark | Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| ● | EMVE250ADA100ME55G | 25 | 10 | φ 5×5.2 L | 3 |



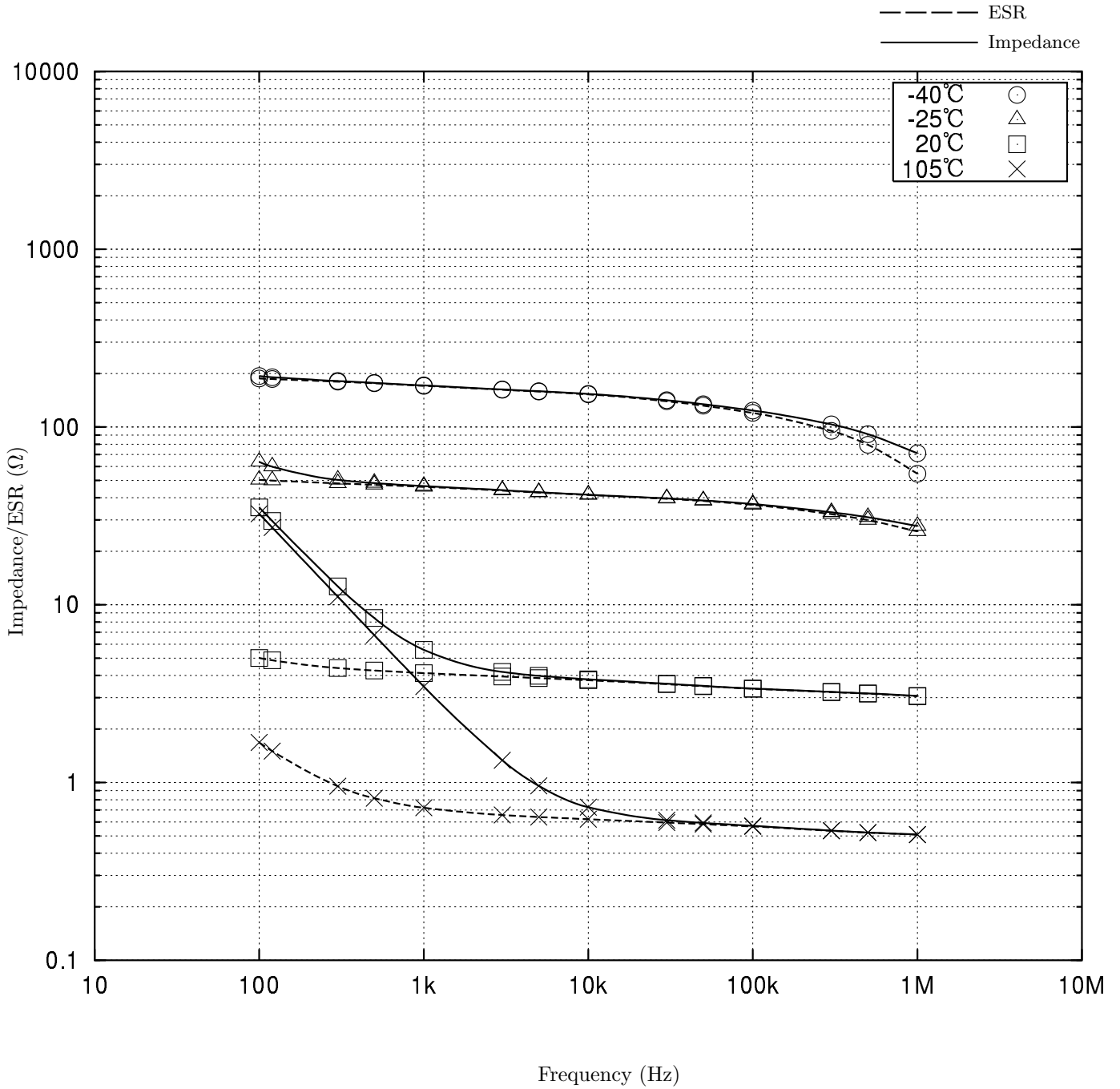
Aluminum Electrolytic Capacitor Reliability data

| Test name | | | | |
|---|------------------|-------------------------------|--------------------------------|-----------------|
| Frequency-Impedance/ESR Characteristics | | | | |
| Test temp. -40 ~ 105 (°C) Measurement LCR meter 4284A | | | | |
| Part No. | Rated Voltage(V) | Nominal Capacitance(μ F) | Case Size($\phi \times L$)mm | Tested qty(pcs) |
| EMVE160ADA100MD55G | 16 | 10 | $\phi 4 \times 5.2$ L | 3 |



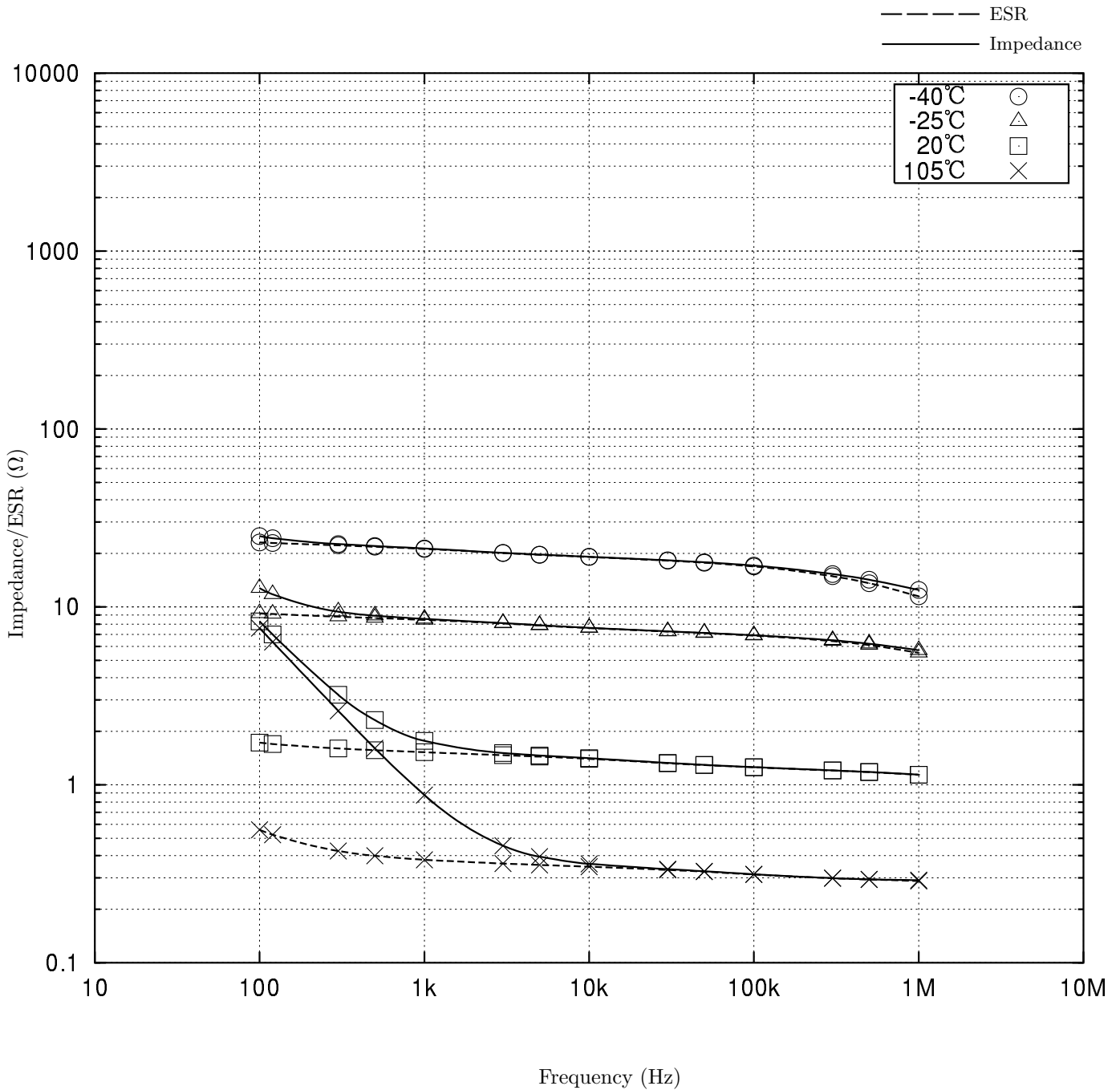
Aluminum Electrolytic Capacitor Reliability data

| | | | | |
|--|------------------|-------------------------|--------------------|-----------------|
| Test name Frequency-Impedance/ESR Characteristics | | | | |
| Test temp. -40 ~ 105 (°C) Measurement LCR meter 4284A | | | | |
| Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| EMVE160ADA470MF55G | 16 | 47 | φ 6.3×5.2 L | 3 |



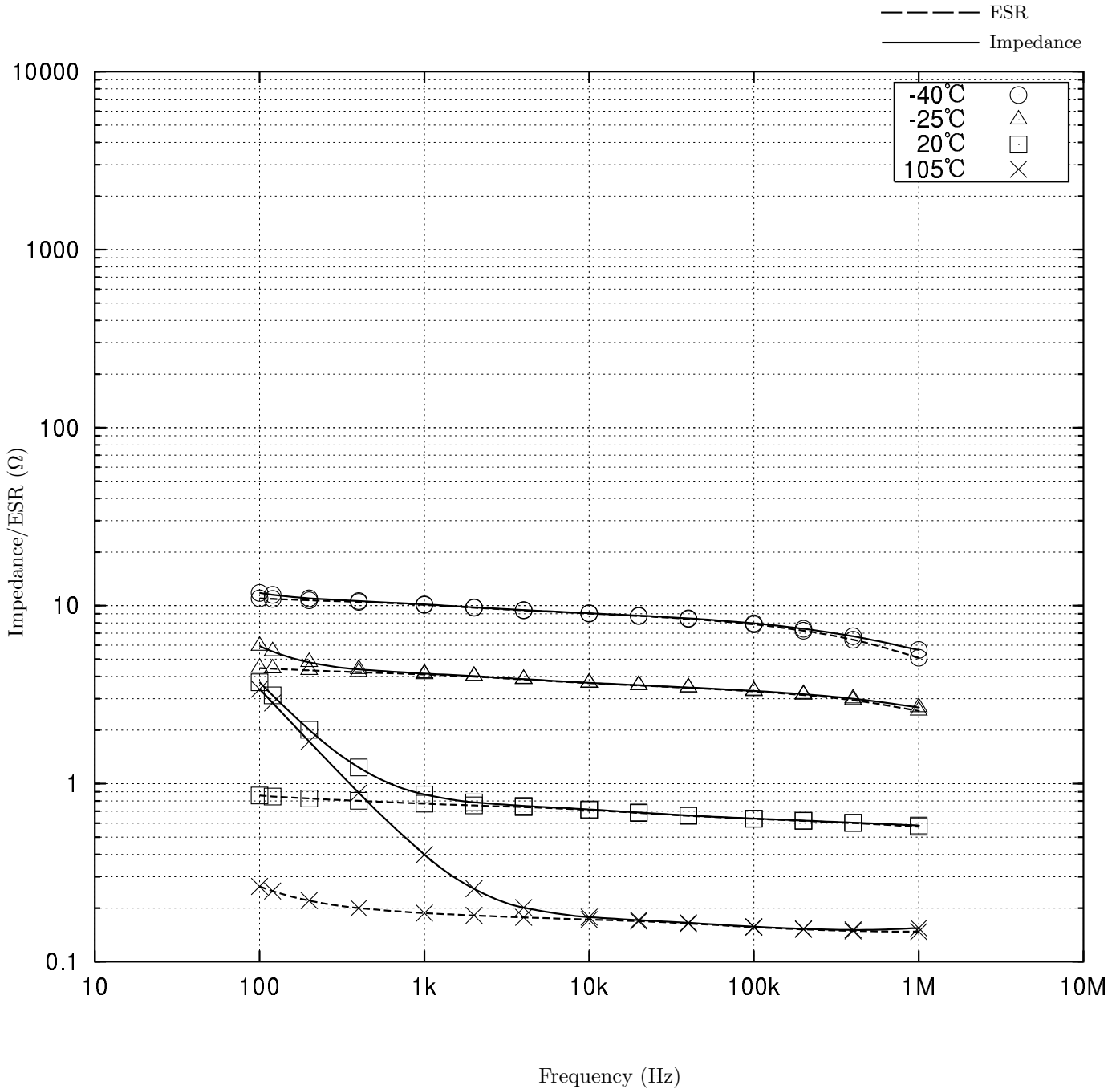
Aluminum Electrolytic Capacitor Reliability data

| Test name | | | | |
|---|------------------|-------------------------------|--------------------------------|-----------------|
| Frequency-Impedance/ESR Characteristics | | | | |
| Test temp. -40 ~ 105 (°C) Measurement LCR meter 4284A | | | | |
| Part No. | Rated Voltage(V) | Nominal Capacitance(μ F) | Case Size($\phi \times L$)mm | Tested qty(pcs) |
| EMVE160ADA221MF80G | 16 | 220 | $\phi 6.3 \times 7.7$ L | 3 |



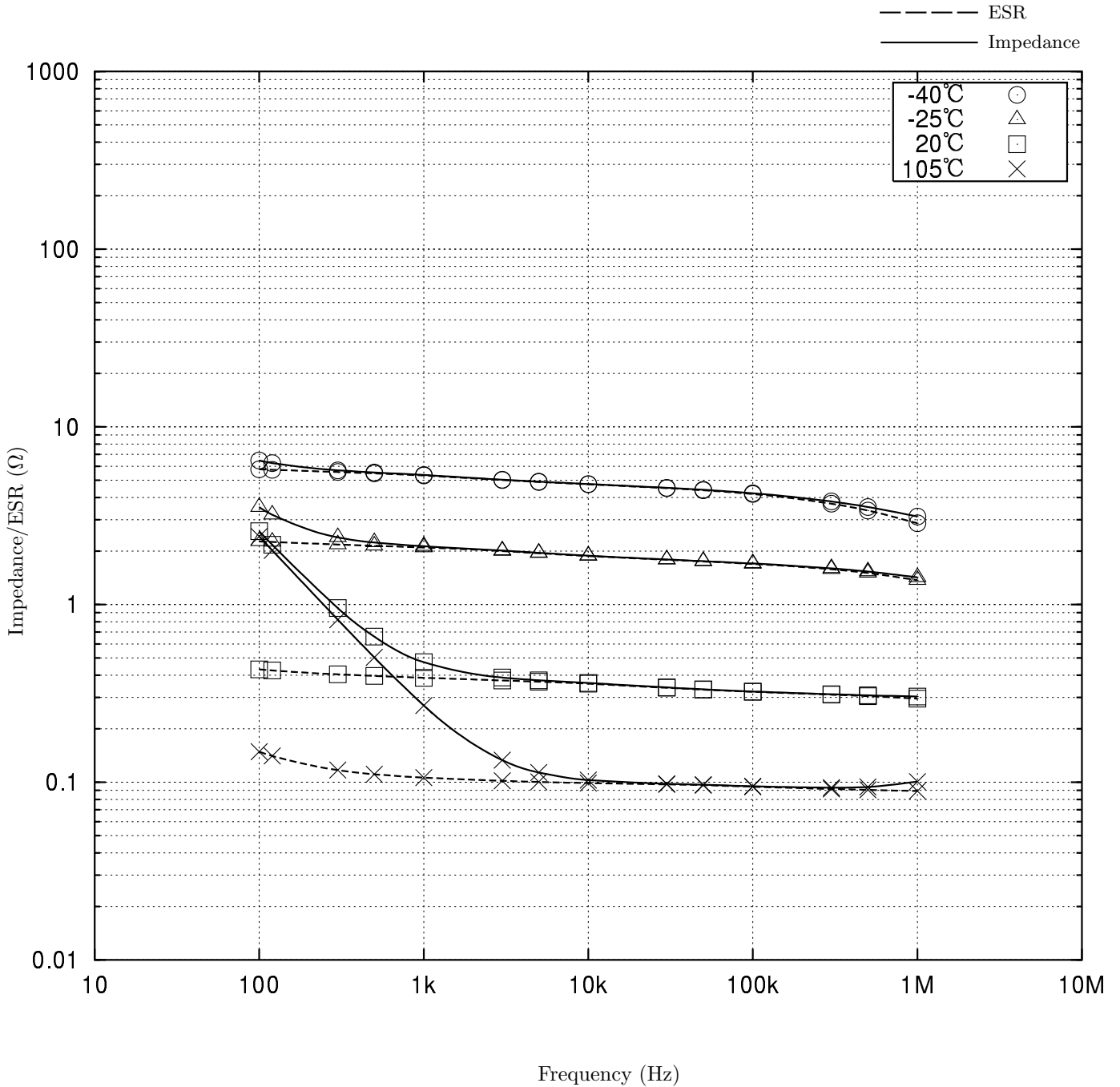
Aluminum Electrolytic Capacitor Reliability data

| Test name | | | | |
|---|------------------|-------------------------------|--------------------------------|-----------------|
| Frequency-Impedance/ESR Characteristics | | | | |
| Test temp. -40 ~ 105 (°C) Measurement LCR meter 4284A | | | | |
| Part No. | Rated Voltage(V) | Nominal Capacitance(μ F) | Case Size($\phi \times L$)mm | Tested qty(pcs) |
| EMVE160ADA471MHA0G | 16 | 470 | $\phi 8 \times 10.0$ L | 3 |



Aluminum Electrolytic Capacitor Reliability data

| | | | | |
|--|------------------|-------------------------|--------------------|-----------------|
| Test name Frequency-Impedance/ESR Characteristics | | | | |
| Test temp. -40 ~ 105 (°C) Measurement LCR meter 4284A | | | | |
| Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| EMVE160ADA681MJA0G | 16 | 680 | φ 10×10.0 L | 3 |



Aluminum Electrolytic Capacitor Reliability data

| | | | | |
|--|------------------|-------------------------|--------------------|-----------------|
| Test name Frequency-Impedance/ESR Characteristics | | | | |
| Test temp. -40 ~ 105 (°C) Measurement LCR meter 4284A | | | | |
| Part No. | Rated Voltage(V) | Nominal Capacitance(μF) | Case Size(φ × L)mm | Tested qty(pcs) |
| EMVE250ADA100ME55G | 25 | 10 | φ 5×5.2 L | 3 |

