



NIC Components Corp.

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SUB: **Temperature Characteristics** of NPC series of Surface Mount Solid Polymer Aluminum Electrolytic Capacitors

Product Specification: www.niccomp.com/catalog/npc.pdf

Pages 2, 3 & 4 show typical temperature characteristics of NPC series over -55C to + 105C

- 120Hz Capacitance value & Loss Tangent (DF)
- 100KHz ESR
- Leakage Current (LC)

Also see *Low ESR Solid Polymer Aluminum Electrolytic Capacitor **Application Guideline***

NIC Series: NPC, NSP, NSPL, NSPX

- VOLTAGE DE-RATING
- SURGE & OVER-VOLTAGE OPERATION
- RIPPLE CURRENT OPERATION
- FAILURE RATE (FR)
- ENDURANCE LOAD LIFE TEST - *No degradation of operation over temperature or time*
- Link: www.niccomp.com/help/techinfo/SolidPolyAlumAppGuide-Sept2015.pdf

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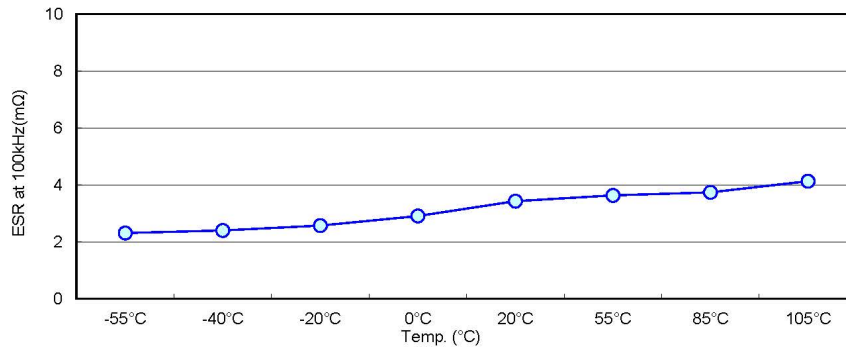
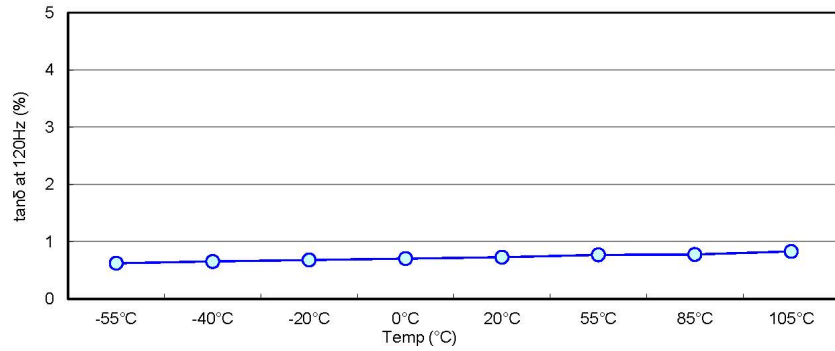
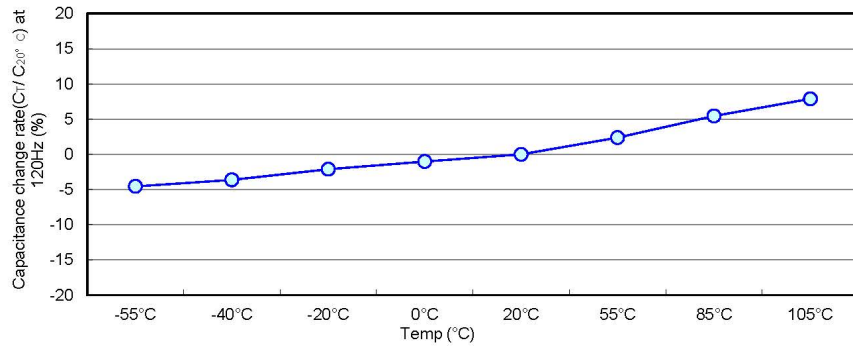
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1	NPC151M2D1UATRF Temperature Characteristic
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Item	NPC151M2D1UATRF (2V-150 μ F PKG H=1.4mm)	
Test conditions	Measuring device	Impedance analyzer 4294A (Agilent)
	Measurement temperature	-55 $^{\circ}$ C~105 $^{\circ}$ C





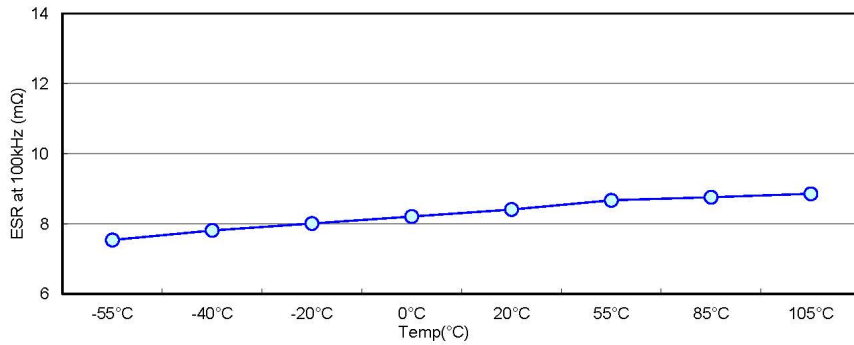
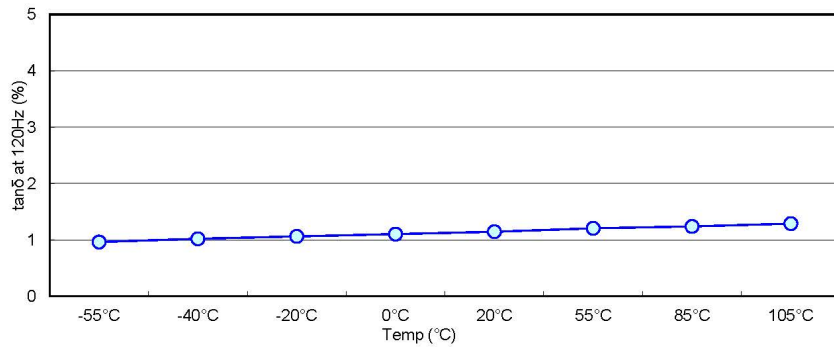
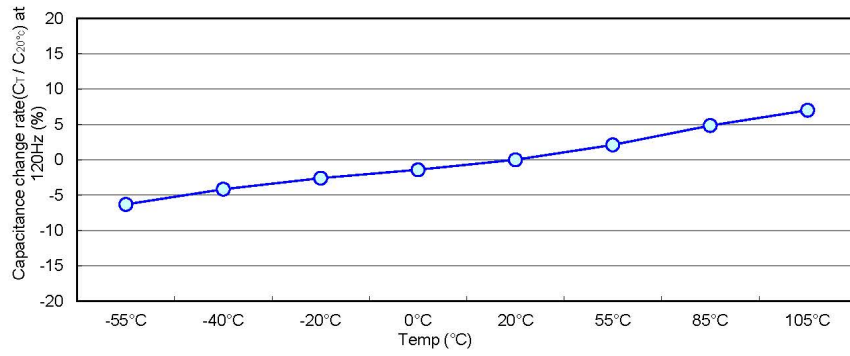
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2	NPC470M6.3D6XATRF Temperature Characteristic
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Item	NPC470M6.3D6XATRF (6.3V-47 μ F PKG H=1.9mm)	
Test conditions	Measuring device	Impedance analyzer 4294A (Agilent)
	Measurement temperature	-55°C~105°C





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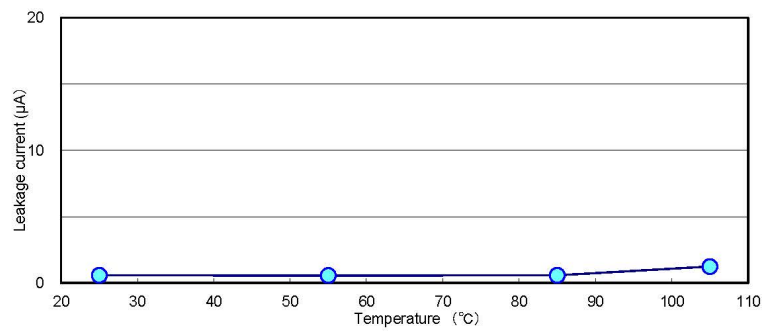
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3	Leakage current temperature characteristics of NPC151M2D1UATRF and NPC470M6.3D6XATRF
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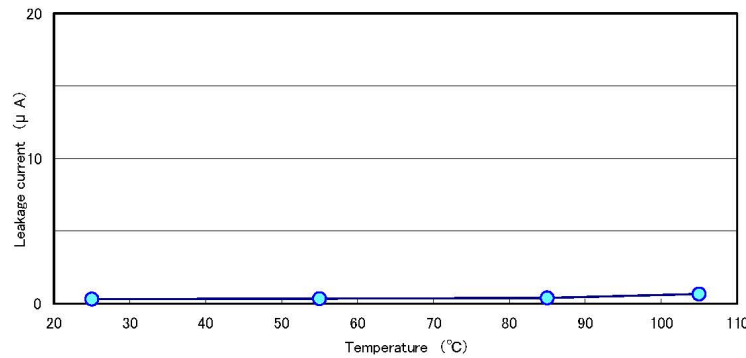
Item	NPC151M2D1UATRF (2V-150 μ F PKG H=1.4mm) and NPC470M6.3D6XATRF (6.3V-47 μ F PKG H=1.9mm)
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Test conditions	Measuring device	Multi-meter
	Measurement temperature	25°C~105°C

• Temperature characteristic of leakage current for NPC151M2D1UATRF



• Temperature characteristic of Leakage current for NPC470M6.3D6XATRF



*Measurement condition of leakage current is Rated voltage, and measured times 5min.