

Introduction of NCR18650PF

December 26, 2012

Energy Company of Panasonic Group
Lithium-Ion Battery Business Unit

NCR18650PF (TENTATIVE)

			TENTATIVE	
Model		NCR18650PD	NCR18650PF	
Nominal Voltage (V)		3.6	ame 3.6	
Rated Capacity (mAh) at 20°C		2680	← 2680	
Typical Capacity (mAh) at 20°C		2830	ame < 2830	
Nominal Capacity (mAh)/Typ. at 25°C		2880	2880	
Standard Charge(CCCV)		0.5lt 4.2V	Same 0.5lt 4.2V	
Dimensions with Tube(Max.)	Diameter	18.5	18.5	
	Height	65.3	ame < 65.3	
Weight (g) (max.)		46.5	Almost 46.5	
Maximum Continuous Discharge Curretnt (A) *Actual(Reference)		10(**Spec.)	ame 10(**Spec.)	
AC-IR(mOhm) Actual		21	21	
DC-IR(mOhm) **Actual		43	ame 43	

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No change the specification

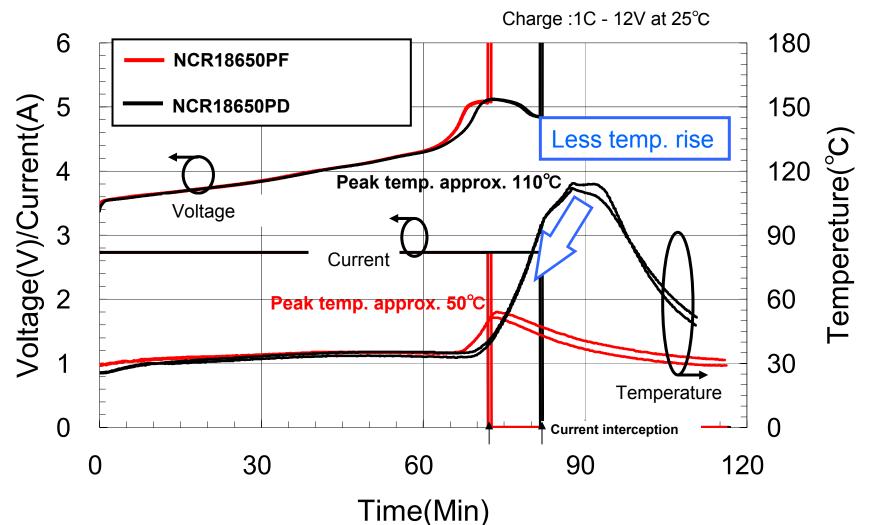
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Changing points of NCR18650PF(TENTATIVE)

	Current	Improved
Top Cap Shape		
Safety vent on the bottom of can		
Over charge characteristics		CID will work earlier than current one

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Over Charge Test for NCR18650PD and PF



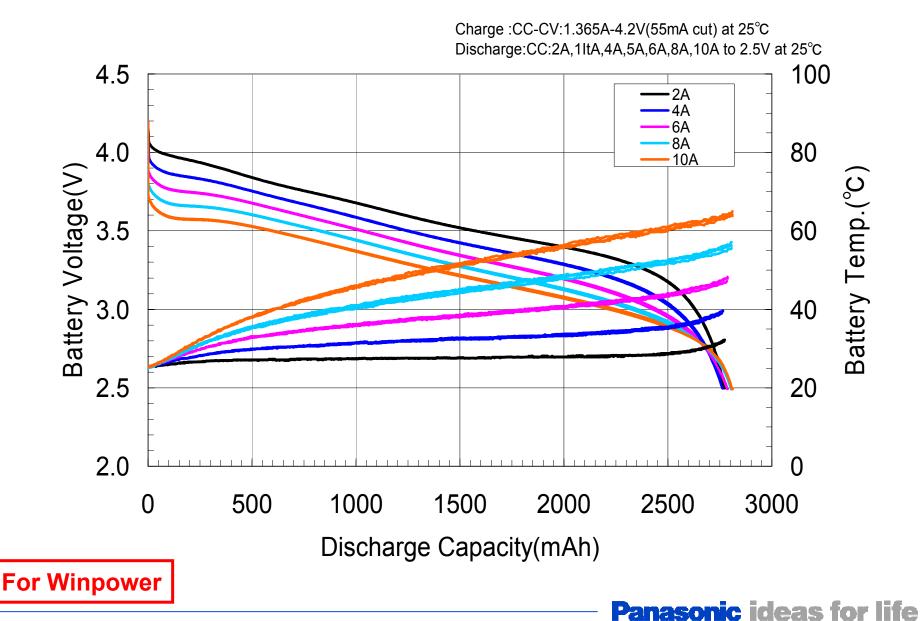
NCR18650PF passed overcharge test

with enough temperature margin. (No fire, No explosion)

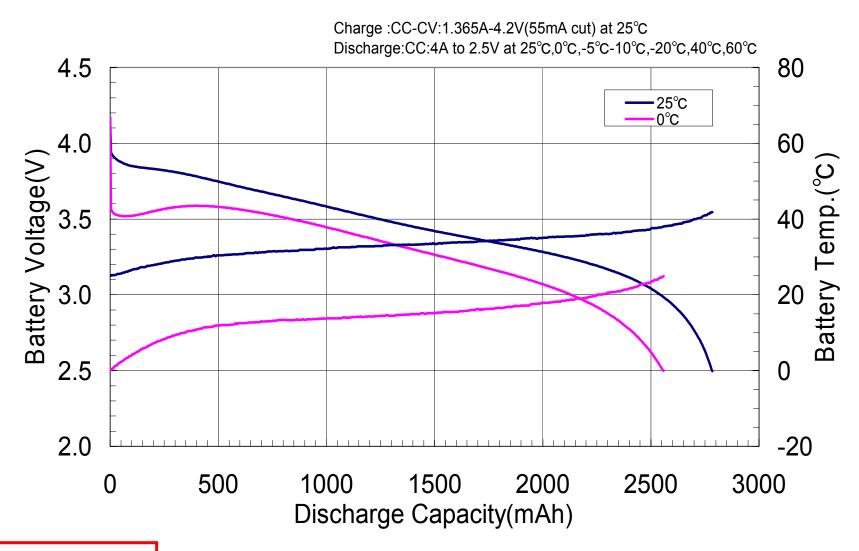
For Will partie of overcharge decreased, compared with current design.

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NCR18650PF Discharge characteristics



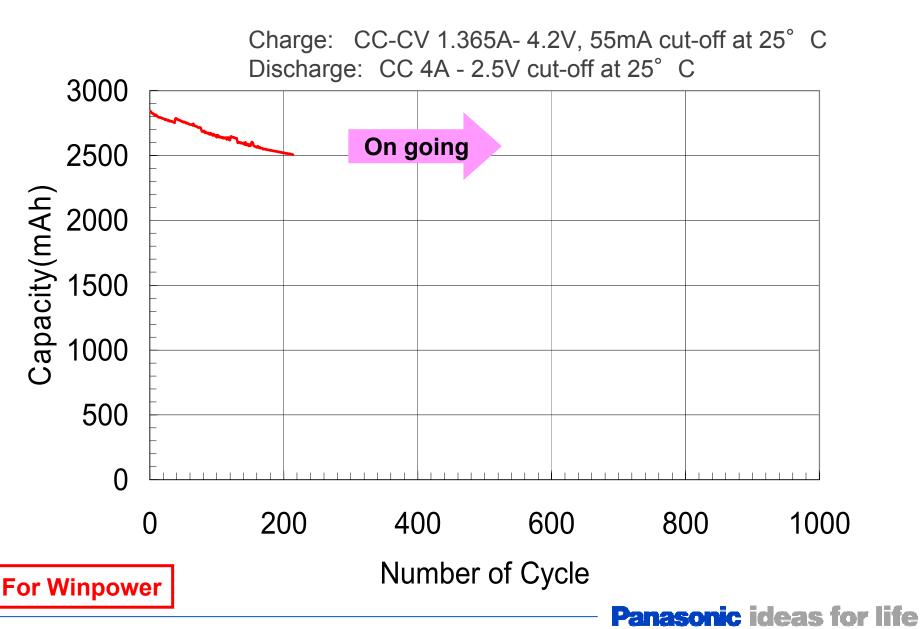
NCR18650PF Discharge characteristics



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NCR18650PF Cycle life characteristics



Schedule (Idea) for NCR18650PF

➤ Sample available : End of January 2013 (Small qty)

➤ Cell mass production (TBD) : 3Q 2013

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