

产品特点

● 高电压、高能量密度

电池电压 3V 约干电池的 2 倍，节省空间实现轻量化。

● 耐高温

高温条件下放电性能稳定，使用安全。

● 优越的放电稳定性

即使是长时间放电，也能显示出稳定的电压特性。

● 优越的储存特性

独特的封装技术，具有自放电少的特性。年自放电率低于 2%

应用

- 工控机 ● 伺服器 ● 机顶盒 ● 智能表计 ● 电脑主板
- 车载 GPS ● 安防监控 ● 玩具 ● 天然气管道数据传输



产品参数

型号	CR1025	CR1216	CR1220	CR1616	CR1620	CR1632	CR2016	CR2025	CR2032	CR2032H ⁺	CR2330	CR2354	CR2450	CR2477	CR3032
标称电压(V)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
标称容量(mAh) ^①	30	25	38	50	70	120	80	150	220	245	260	520	600	1000	500
标称放电电流(mA)	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.4	0.4	0.6	0.4
最大连续电流(mA)	2	2	2	3	3	3	5	5	5	6	6	6	7	7	10
最大脉冲电流(mA)	5	5	5	8	8	8	15	15	15	18	20	20	25	25	30
工作温度范围(°C)	-40~+85	-40~+85	-40~+85	-40~+85	-40~+85	-40~+85	-40~+85	-40~+85	-40~+85	-20~+70	-40~+85	-40~+85	-40~+85	-40~+85	-40~+85
尺寸 ^②	直径 (mm)	10.0	12.5	12.5	16.0	16.0	16.0	20.0	20.0	20.0	23.0	23.0	24.5	24.5	30.0
	高度 (mm)	2.5	1.6	2.0	1.6	2.0	3.2	1.6	2.5	3.2	3.2	3.0	5.4	5.0	7.7
重量 ^③	0.7	0.7	0.8	1.2	1.3	2.0	2.0	2.6	3.2	3.2	4.0	6.9	6.8	10.5	6.8

①标称容量是指在 20°C 的环境下，以标准放电电流放电，在电池电压下降到 2.0V 时的放电容量。

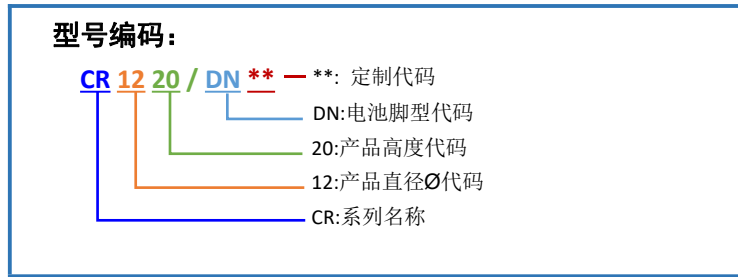
②尺寸和重量只是就电池本身而言，但可能会因为端子引脚的形状和其他因素而改变。

注意1：如果连续使用温度高于+70°C或低于-20°C。请联系 CDA。

产品尺寸

CR1025	CR1216	CR1220	CR1616	CR1620
CR1632	CR2016	CR2025	CR2032/CR2032H	CR2330
CR2354	CR2450	CR2477	CR3032	

产品物料编码说明










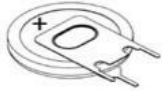

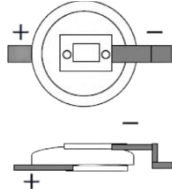
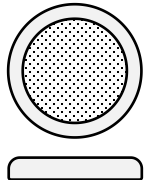




纽扣电池封装配置

型号	封装类型		配置类型
	有 PET 绝缘套管	无 PET 绝缘套管	
CR1025	T1	CR1025/DN	T1
CR1220	H1	CR1220/DN	H1
CR2032	FA	CR2032/DN	T2
CR2354	H2	CR2354/DN	F90
CR2430	H2	CR2430/DN	H2
CR2450	G	CR2450/DN	G
CR3032	G	CR3032/DN	G

* 以上型号均可裸电池或无套管带脚出厂。

配置类型

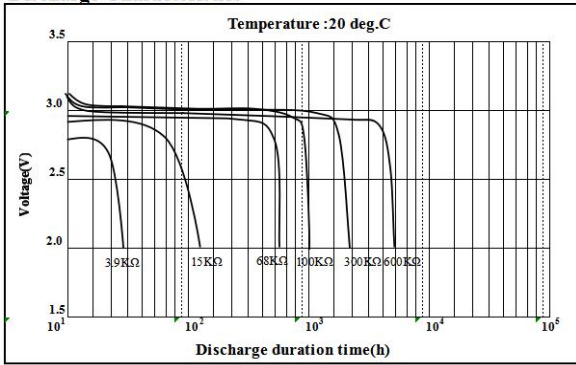
G - TYPE	H - TYPE	H1 - TYPE	H2 - TYPE	R - TYPE
				
T1 - TYPE	T2 - TYPE	V - TYPE	V1 - TYPE	W - TYPE
				
F90 - TYPE	FA - TYPE	DN - TYPE	1S - TYPE	1ST - TYPE
				

*以上配置类型均可依据顾客需求定制对应脚型/脚距及不同端子类型。

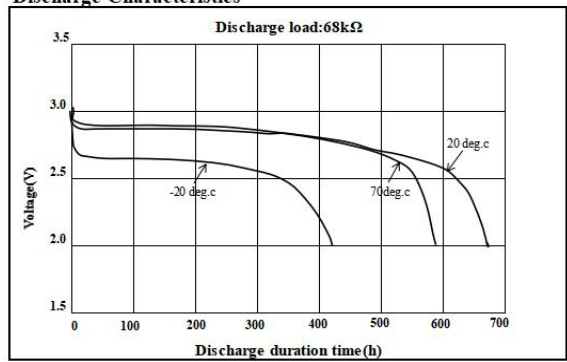
放电特性

CR1025

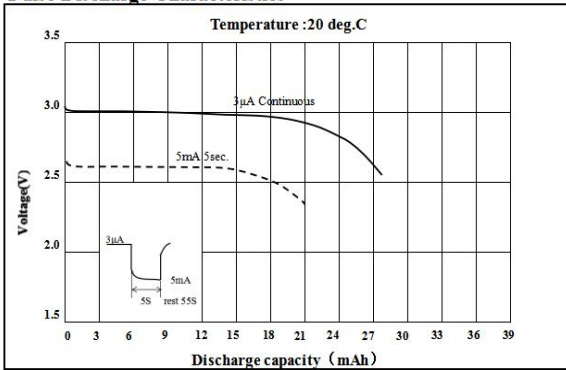
Discharge Characteristics



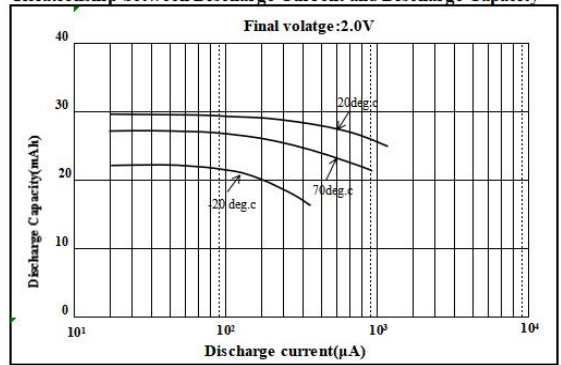
Discharge Characteristics



Pulse Discharge Characteristics

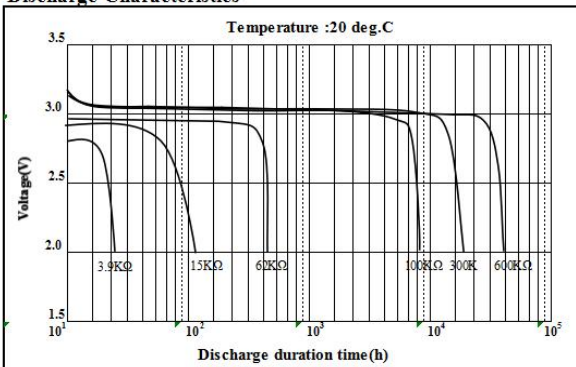


Relationship between Discharge Current and Discharge Capacity

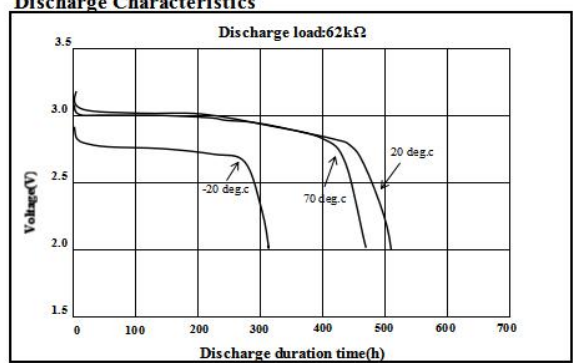


CR1216

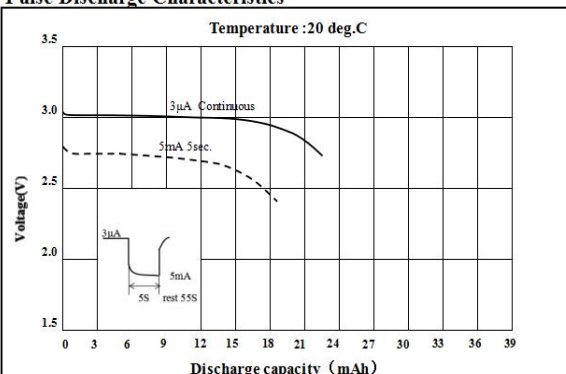
Discharge Characteristics



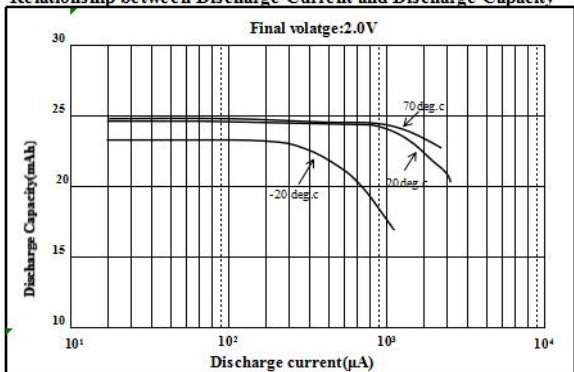
Discharge Characteristics



Pulse Discharge Characteristics



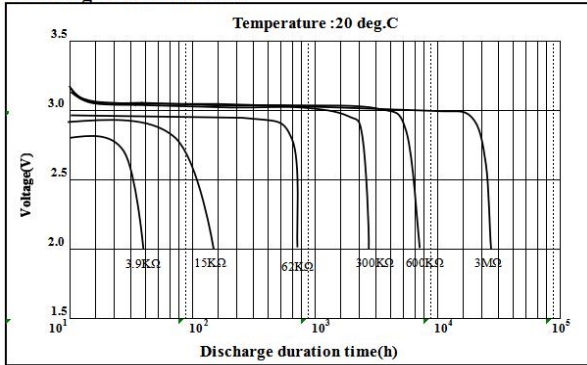
Relationship between Discharge Current and Discharge Capacity



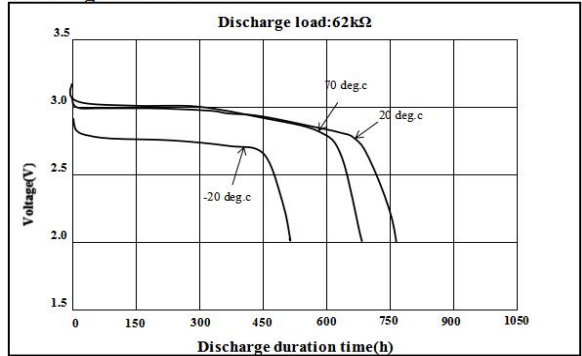
放电特性

CR1220

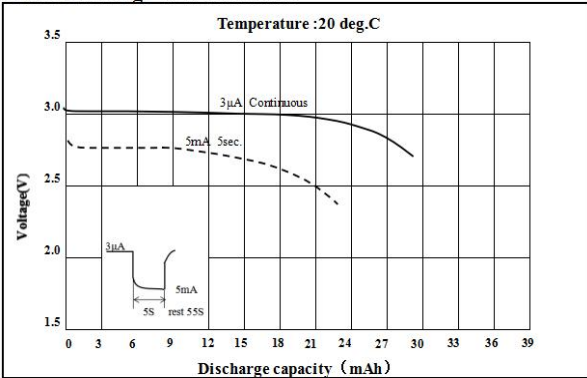
Discharge Characteristics



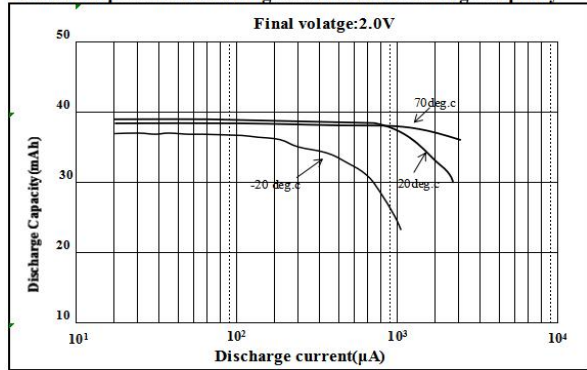
Discharge Characteristics



Pulse Discharge Characteristics

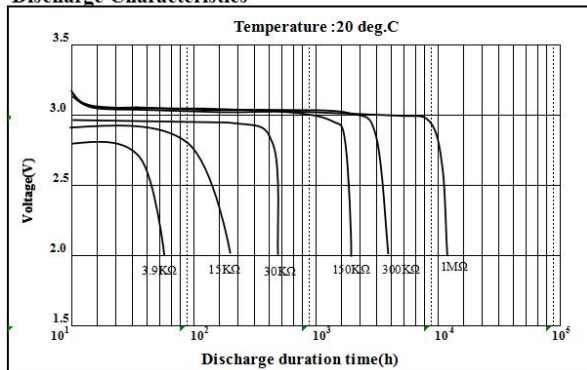


Relationship between Discharge Current and Discharge Capacity

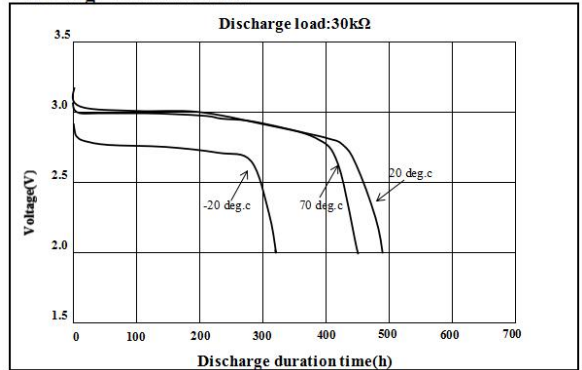


CR1616

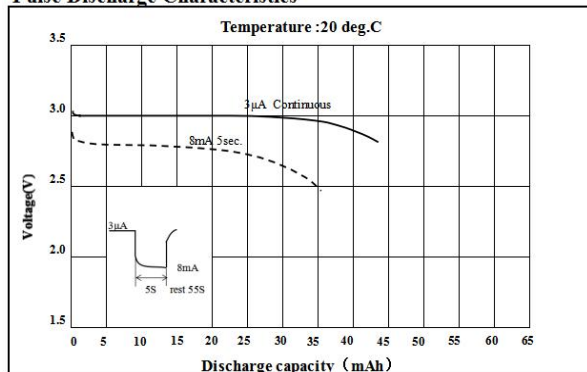
Discharge Characteristics



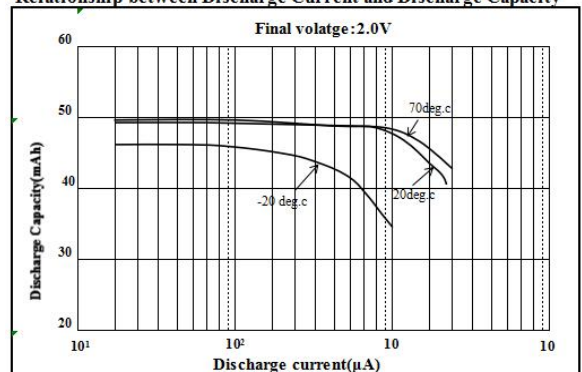
Discharge Characteristics



Pulse Discharge Characteristics



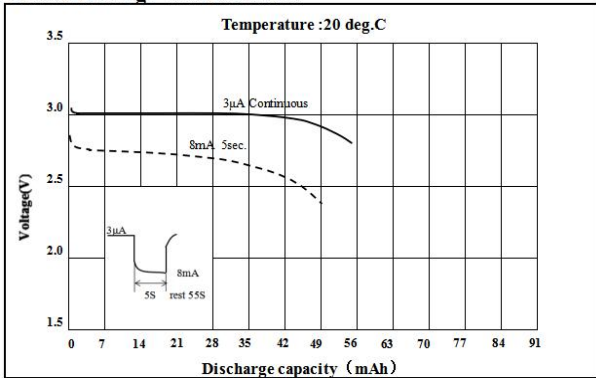
Relationship between Discharge Current and Discharge Capacity



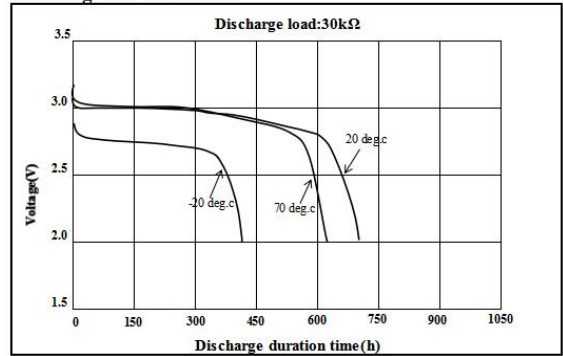
放电特性

CR1620

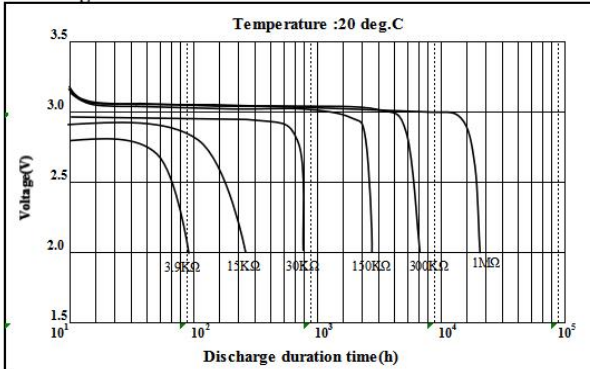
Pulse Discharge Characteristics



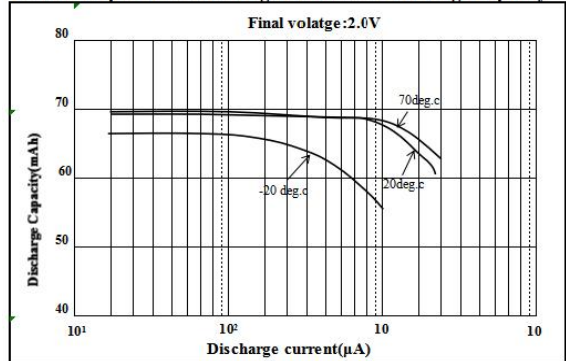
Discharge Characteristics



Discharge Characteristics

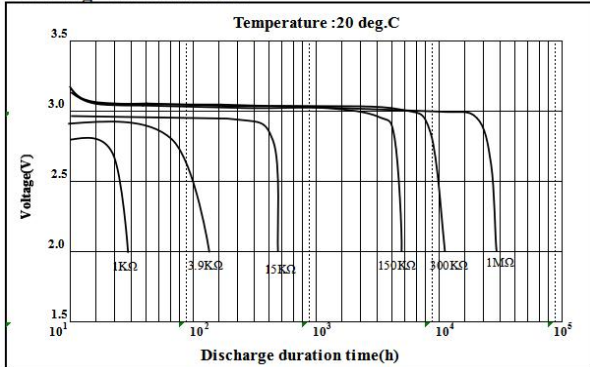


Relationship between Discharge Current and Discharge Capacity

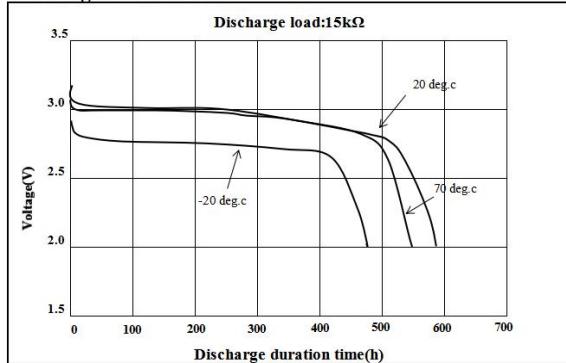


CR1632

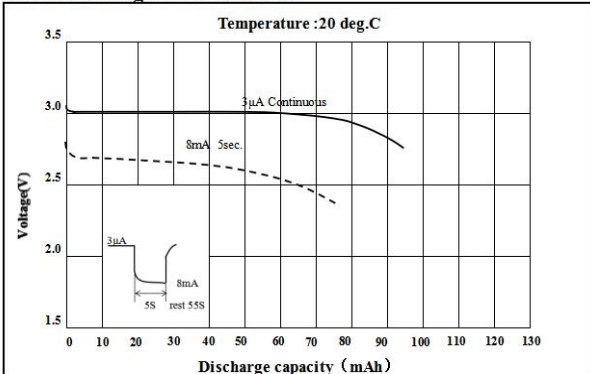
Discharge Characteristics



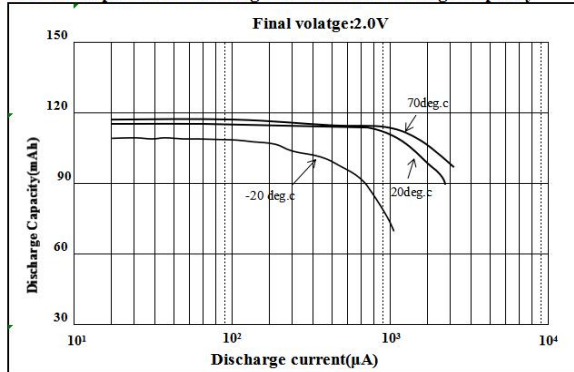
Discharge Characteristics



Pulse Discharge Characteristics



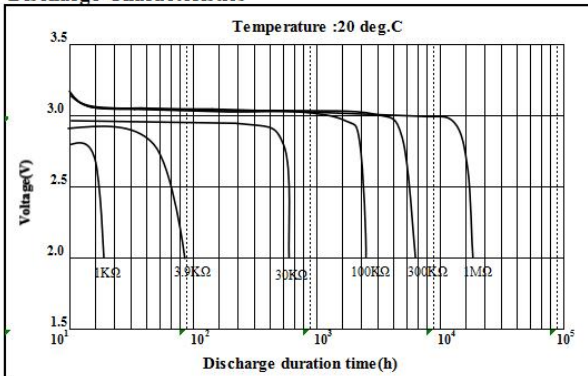
Relationship between Discharge Current and Discharge Capacity



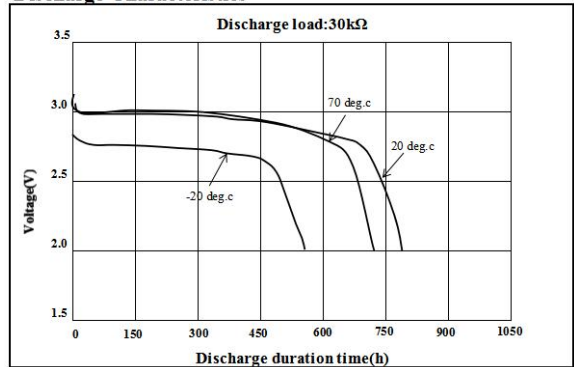
放电特性

CR2016

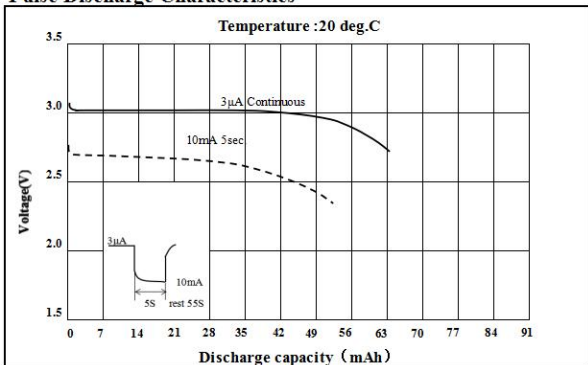
Discharge Characteristics



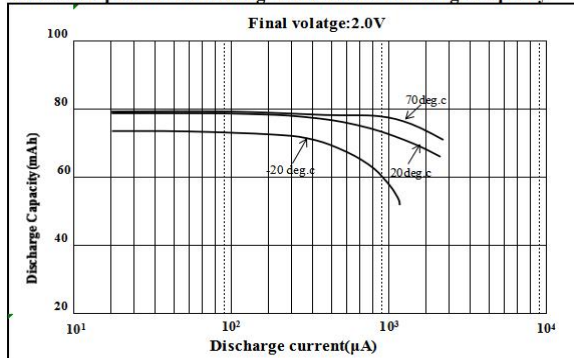
Discharge Characteristics



Pulse Discharge Characteristics

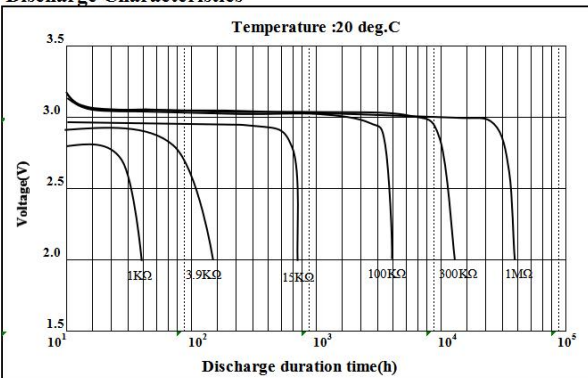


Relationship between Discharge Current and Discharge Capacity

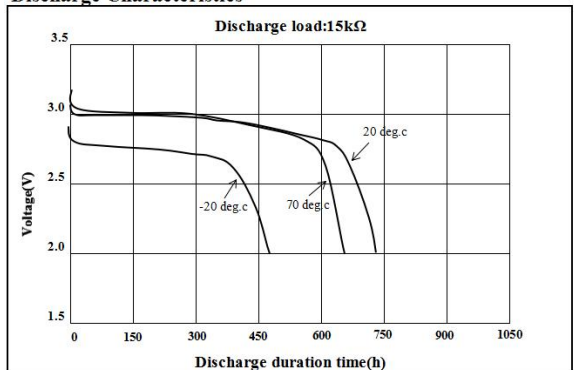


CR2025

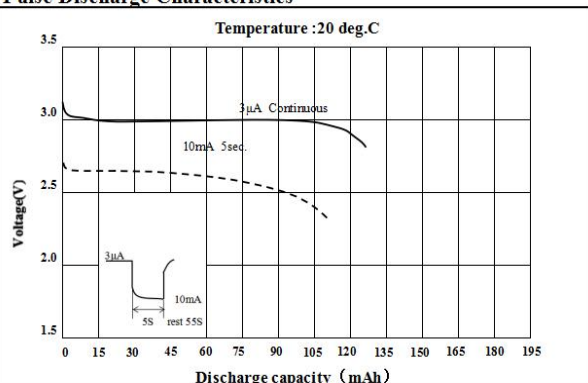
Discharge Characteristics



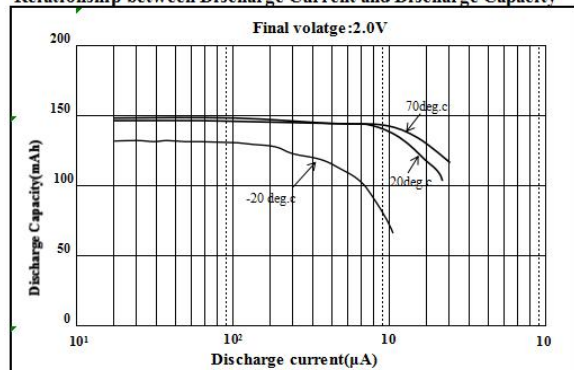
Discharge Characteristics



Pulse Discharge Characteristics



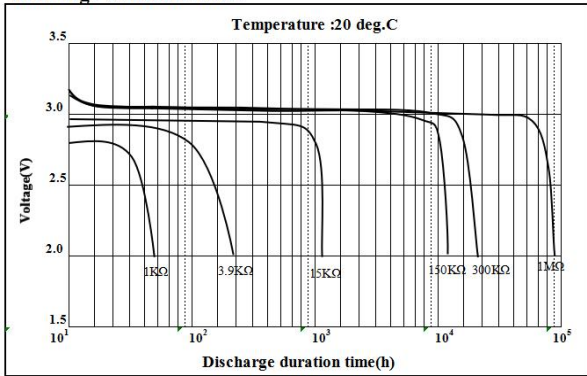
Relationship between Discharge Current and Discharge Capacity



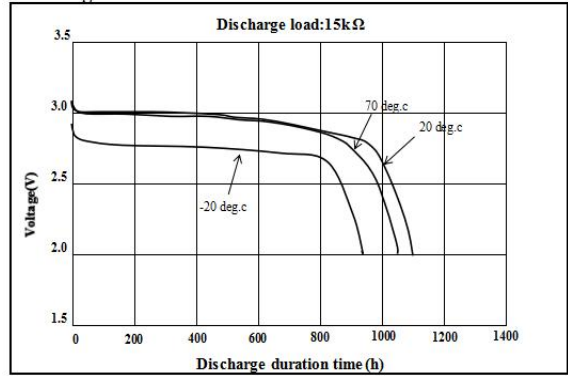
放电特性

CR2032

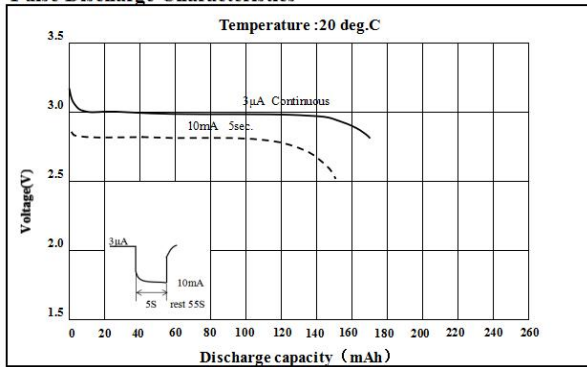
Discharge Characteristics



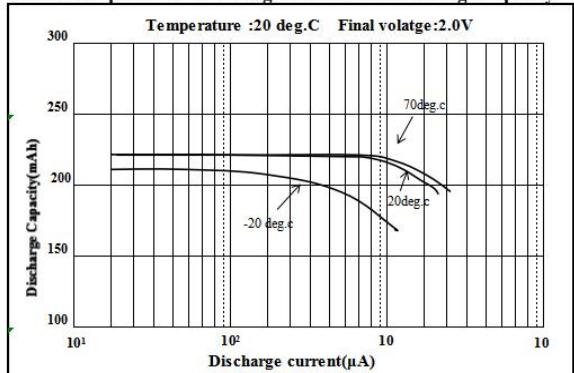
Discharge Characteristics



Pulse Discharge Characteristics

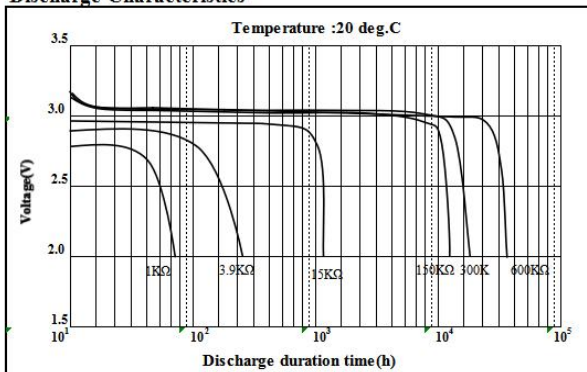


Relationship between Discharge Current and Discharge Capacity

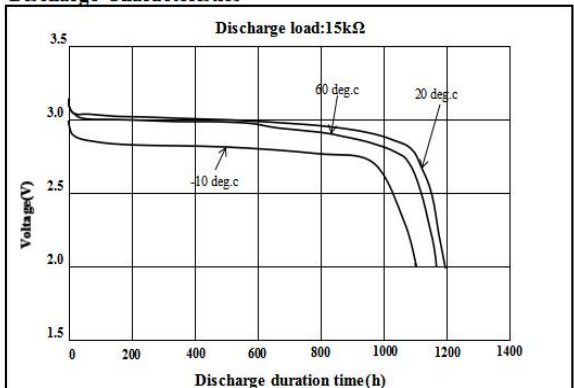


CR2032H

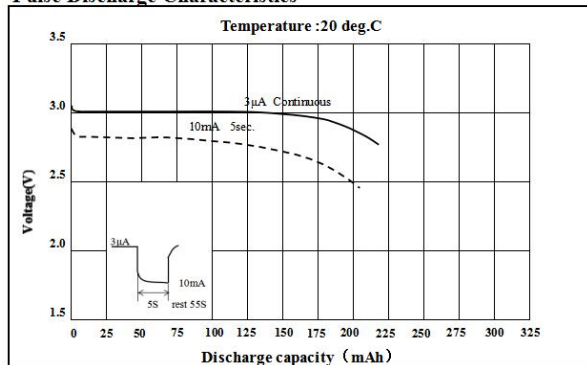
Discharge Characteristics



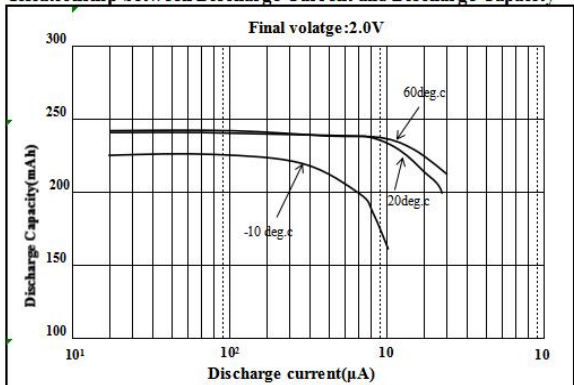
Discharge Characteristics



Pulse Discharge Characteristics



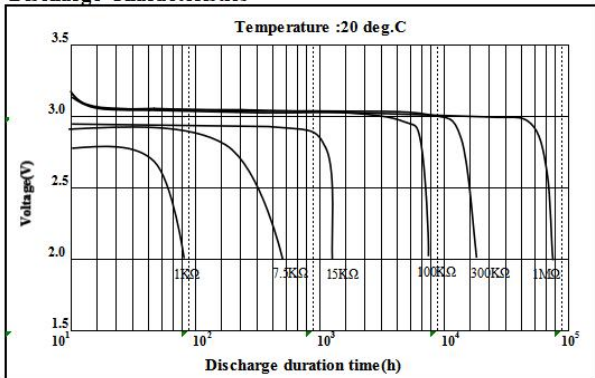
Relationship between Discharge Current and Discharge Capacity



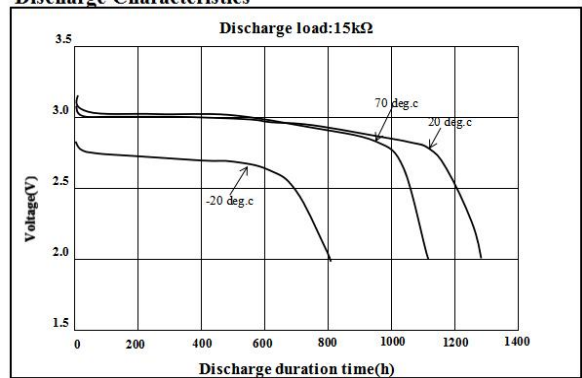
放电特性

CR2330

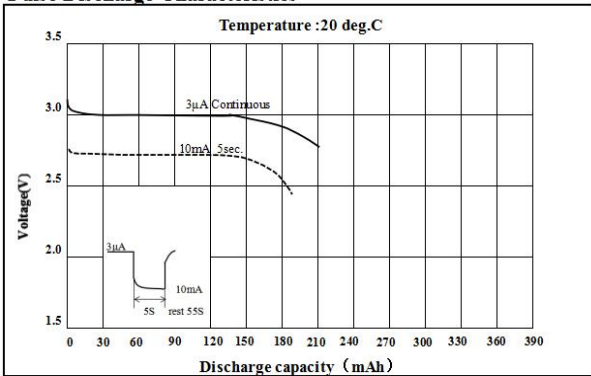
Discharge Characteristics



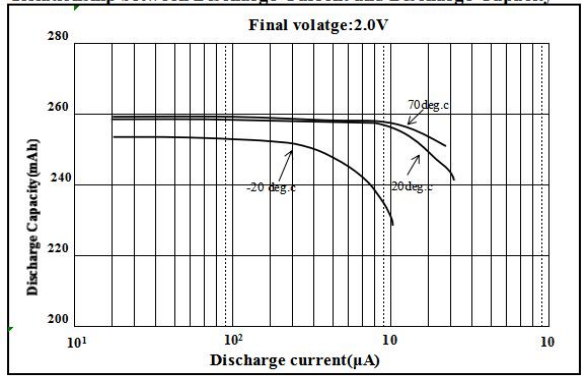
Discharge Characteristics



Pulse Discharge Characteristics

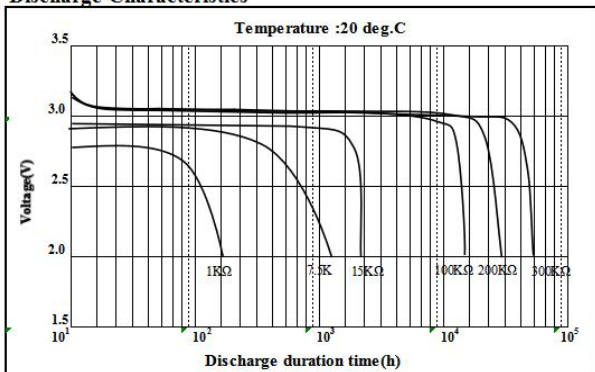


Relationship between Discharge Current and Discharge Capacity

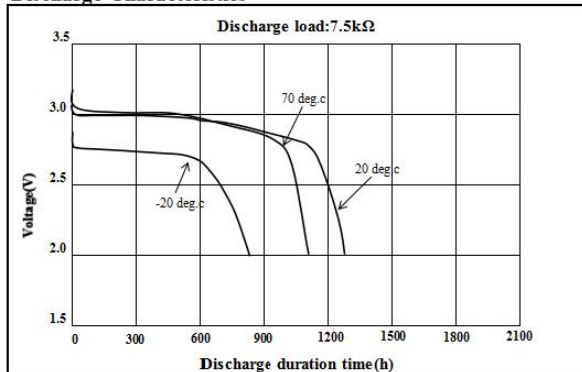


CR2354

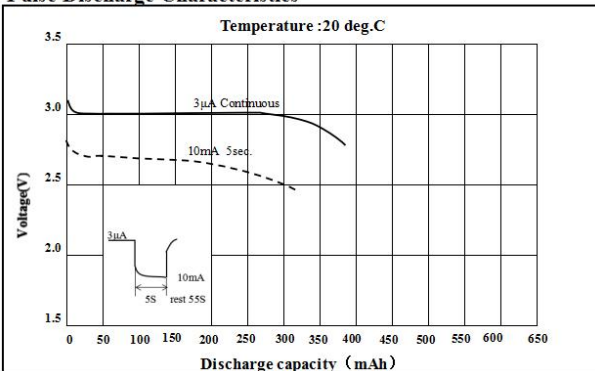
Discharge Characteristics



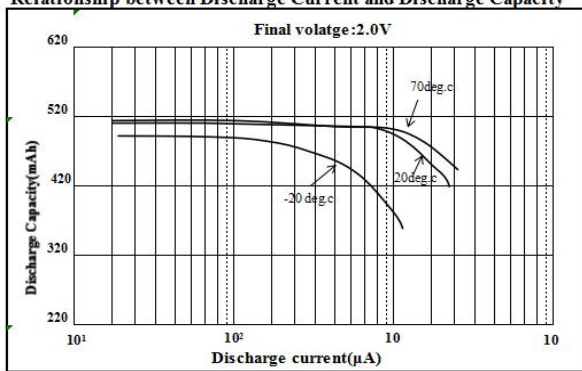
Discharge Characteristics



Pulse Discharge Characteristics



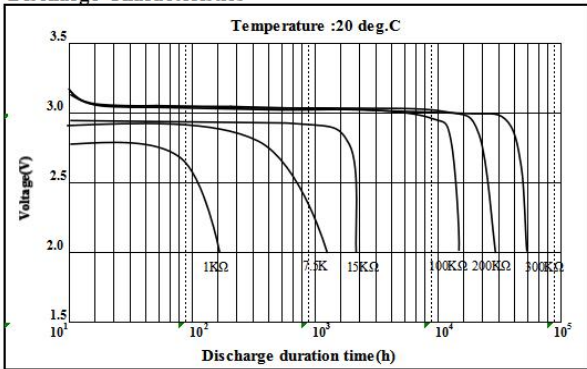
Relationship between Discharge Current and Discharge Capacity



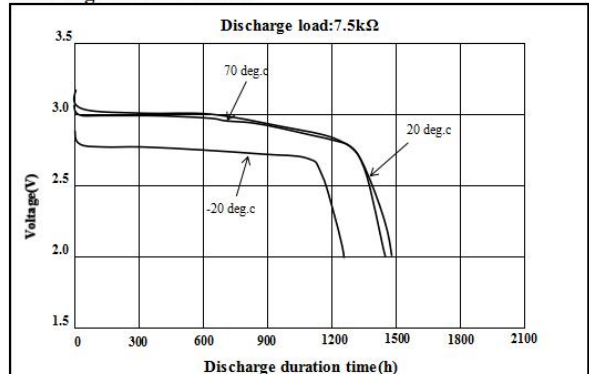
放电特性

CR2450

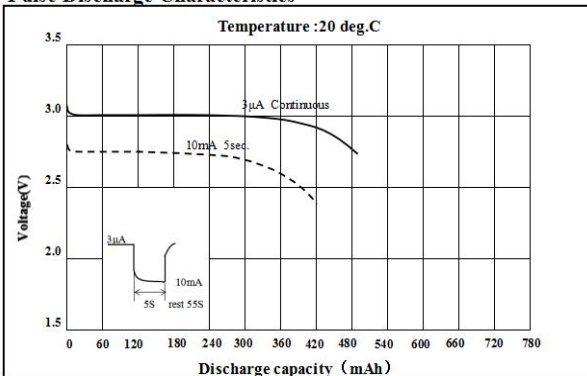
Discharge Characteristics



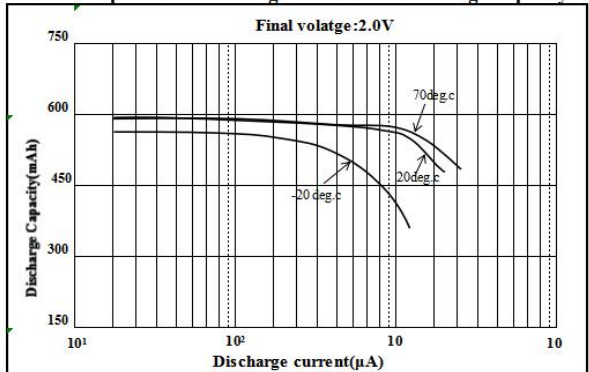
Discharge Characteristics



Pulse Discharge Characteristics

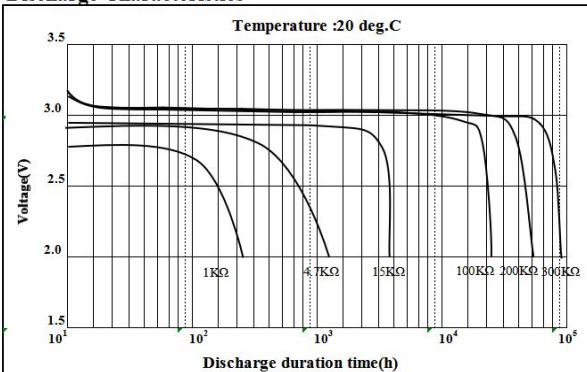


Relationship between Discharge Current and Discharge Capacity

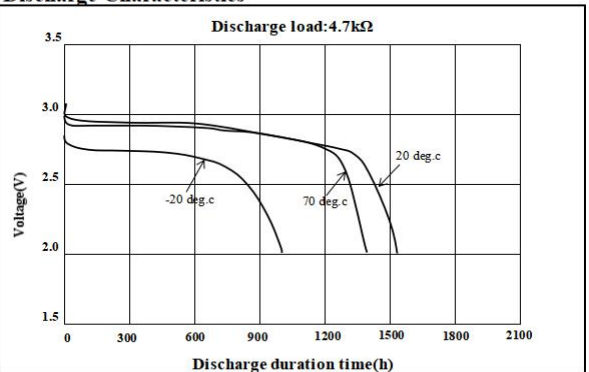


CR2477

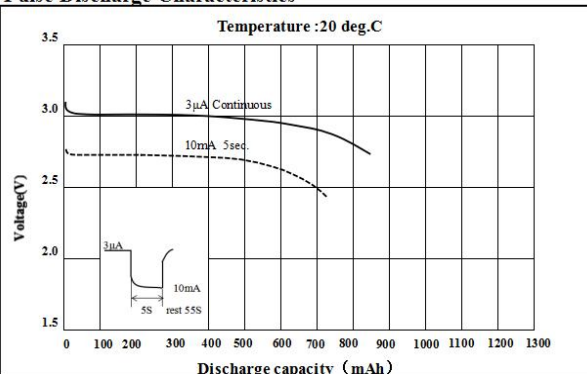
Discharge Characteristics



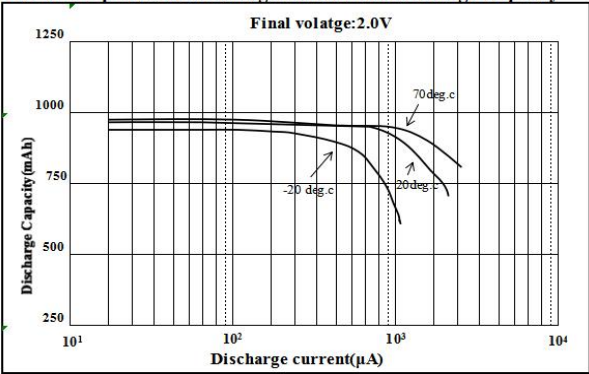
Discharge Characteristics



Pulse Discharge Characteristics



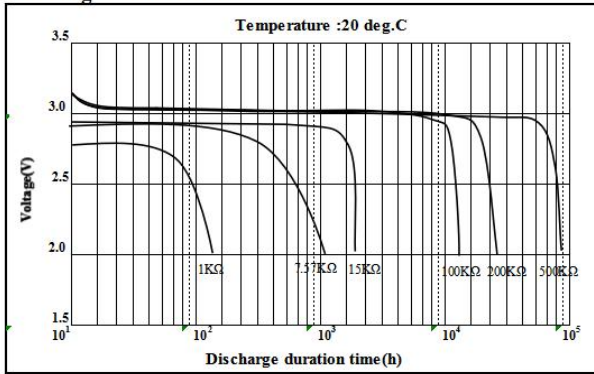
Relationship between Discharge Current and Discharge Capacity



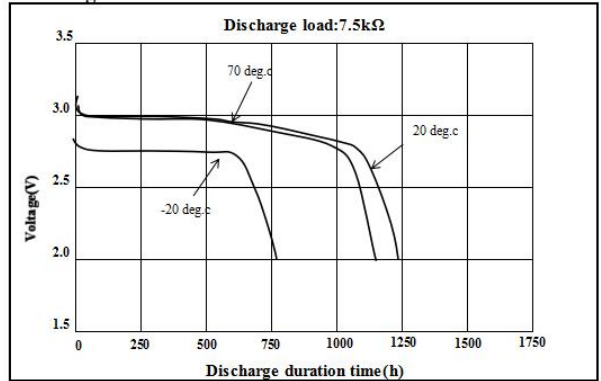
放电特性

CR3032

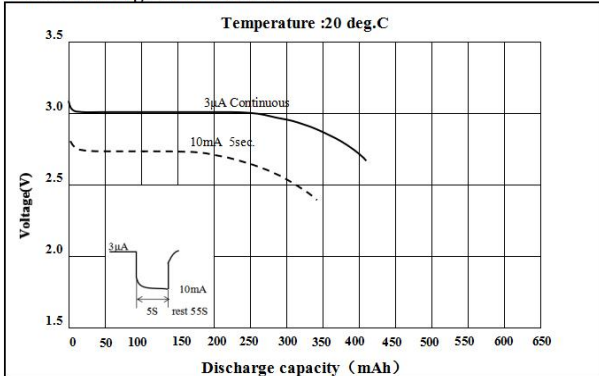
Discharge Characteristics



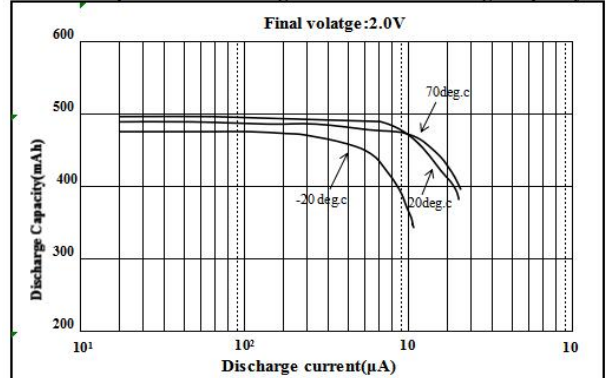
Discharge Characteristics



Pulse Discharge Characteristics

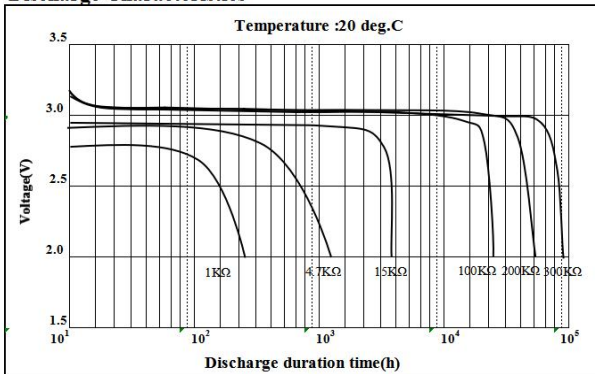


Relationship between Discharge Current and Discharge Capacity

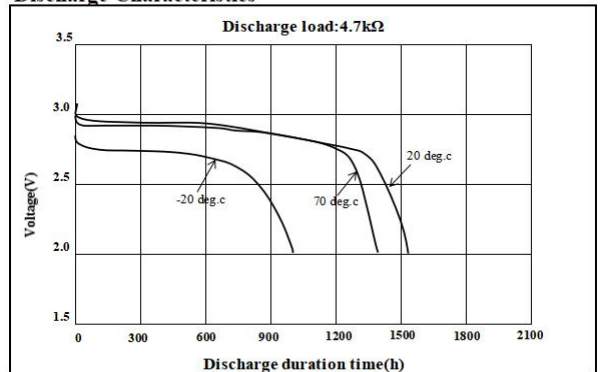


CR2477

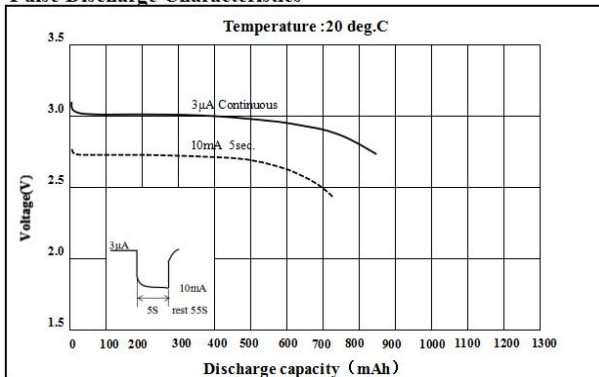
Discharge Characteristics



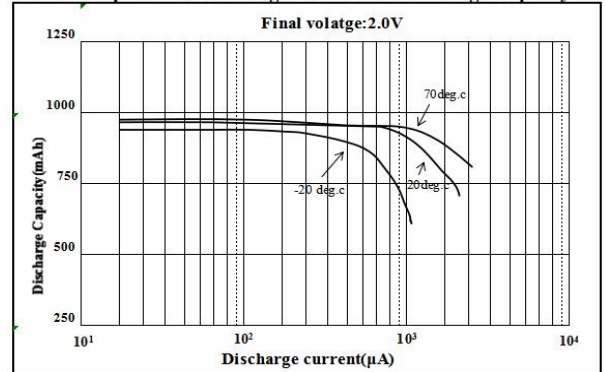
Discharge Characteristics



Pulse Discharge Characteristics



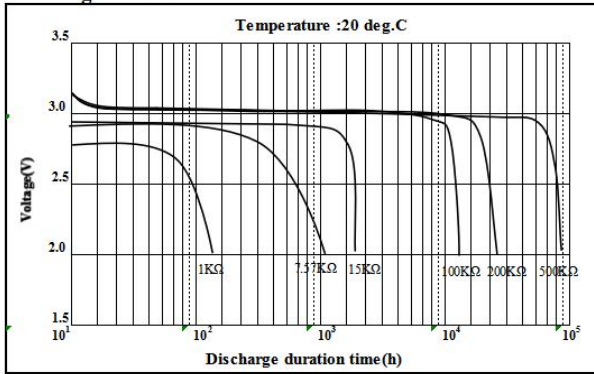
Relationship between Discharge Current and Discharge Capacity



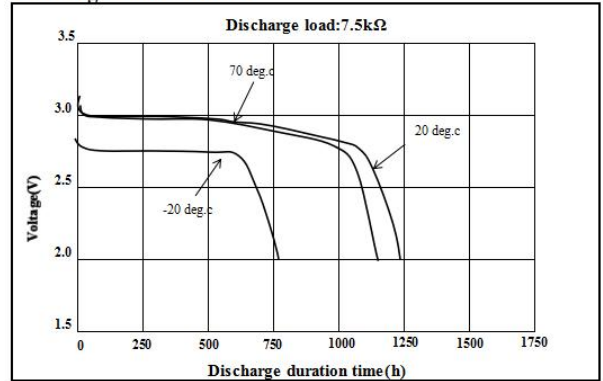
放电特性

CR3032

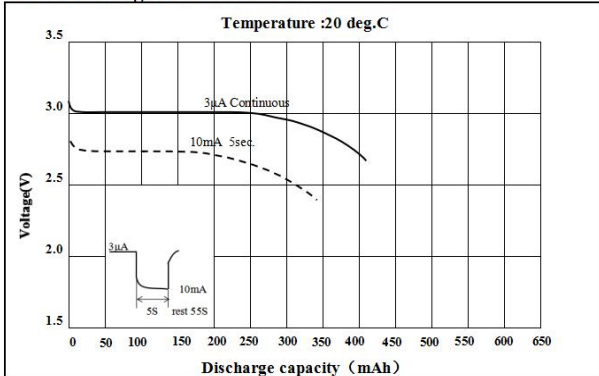
Discharge Characteristics



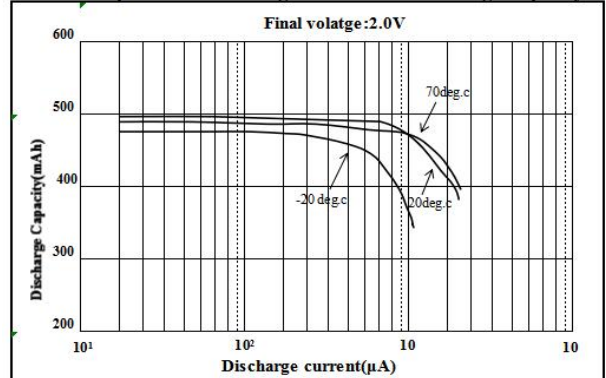
Discharge Characteristics



Pulse Discharge Characteristics

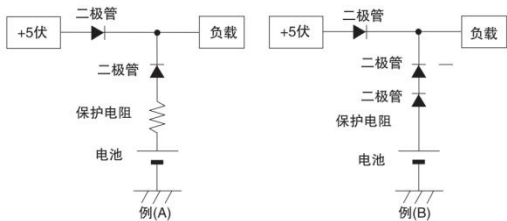


Relationship between Discharge Current and Discharge Capacity



警告-电路设计

此电池为一次电池，不能充电。如果作为存储器或 RTC 备用电源使用，必须使用二极管来阻止主电源或者其他电池对其充电，并使用保护电阻来控制电流，如下图所示。当选择二极管和保护电阻时，以下几点应特别注意。



• 负载供电电压

由于二极管和电阻在工作时会产生电压降，请供电电压负载中将这电压降考虑进去。

• 使用二极管防止充电

请选择漏电流尽可能小的二极管。请将由于漏电流产生的充电容量控制在标称容量的百分之一以内。

• 使用并设置保护电阻

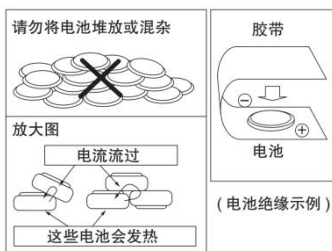
保护电阻用于防止电池在二极管损坏时被巨大的电流充电。请安装该电阻，以保证最大电流不超过下表所列电流值。比如说，CR2032 电池使用例(A)中的电路，并与 5 伏电源相连接。由于最大允许充电电流为 10 毫安，且该电池电压为 3 伏，我们就必须使用一个电阻的阻值 $R > = (5V-3V)/10$ 毫安 $=0.2k$ 欧姆，也就是说，电阻阻值至少是 0.2 千欧姆。

型号	最大电流
CR1025	2.5mA
CR1216	2.5mA
CR1220	10mA
CR1616	10mA
CR1620	10mA
CR1632	10mA
CR2016	10mA
CR2025	10mA
CR2032	10mA
CR2032H	10mA
CR2330	10mA
CR2354	10mA
CR2450	15mA
CR2477	15mA
CR3032	15mA

注意：如果二极管失效，即使使用了保护电阻也应尽快予以更换。考虑到二极管和保护电阻可能出现故障，在电路中应有其他安全措施的设计。

警告-废弃

电池受国家或地方法规管制。请遵守相应的法规要求。由于废弃电池中残留电量，与其它金属接触后会引起变形、泄露、过热或爆炸，因此，废弃之前确保用胶带等其它绝缘材料将(+)和(-)接线端包覆住。



注意-操作使用/存放

• 严禁将电池置于超声波中

由于将电池置于超声波环境中可能会使电池内部的金属破碎而造成电池短路，最终导致电池变形、泄漏、过热、爆炸或起火。

• 严禁使电池严重的震动

掉落，抛掷或践踏电池可能会造成电池变形、泄漏、过热、爆炸或起火。

• 严禁在非常热的地方使用电池，也不可将电池留在炎热

处，如阳光直射处，或炎热天气的汽车中如果这样做可能会导致电池变形、泄漏、过热、爆炸或起火。

• 严禁让电池与水接触

如果这样做会使电池生锈，或使电池变形、泄漏、过热、爆炸或起火。

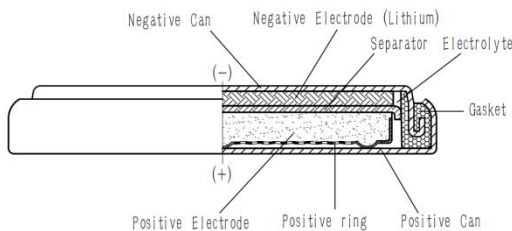
• 严禁将电池放在炎热、高湿度的地方存放

这样做会使电池性能恶化。而且，在这样的环境中，会使电池变形、泄漏、过热、爆炸或起火。

• 保持 2N 以上的接触压力

由于接触不良，电池电压可能低于目标值，因此请保持 2N 以上的接触压力以确保适当的接触电阻。

结构



警告-处理

• 严禁吞咽

将电池置于远离婴儿和儿童的地方，防止他们吞咽电池。如已吞咽电池，请立即咨询医生。

• 严禁更换

根据不同的电池制造商，即使是同型号或同类型的电池也可能在性能上有很大的区别。如果您是设备制造商，而且需要更换电池，请使用与现有电池相同类型和型号的新电池来代替，请将您的设备设计成最终用户不可误换电池的形式。

⚠警告-处理**● 严禁反向安装电池的正负极**

不恰当的安装电池会导致电池短路、充电或者强制放电。这会造成电 池变形、泄漏、过热、爆炸或起火。

● 严禁将电池短路

不要将正负极短路。不要将电池和金属物品放在一起携带或保存，如项链和发卡。安装时避免接触到可能导致电池短路的金属物。否则会导致电池变形、泄漏、过热、爆炸或起火。

● 严禁加热

将电池加热至超过 100 摄氏度会增加其内部压力，从而造成电池变形、泄漏、过热、爆炸或起火。

● 严禁置于明火之中

将电池置于明火中会导致锂金属熔化，并造成电池起火或爆炸。

● 严禁拆解电池。

不要拆解电池，这会损坏隔离层或垫片，从而造成电池变形、泄漏、过热、爆炸或起火。

● 严禁触摸电池的电极

不要将电池的电极和您的皮肤或手指接触。否则您皮肤上的水分可能会导致电池放电，这可能会产生某种使您遭受化学烧伤的化学物质。

● 将泄漏的电池置于远离明火处

如果怀疑有泄漏或者闻到了强烈的异味，将电池置于远离明火处，因为泄漏的液体可能起火。

● 严禁将接线端或导线直接焊接到电池本体上

焊接时的加热会导致锂的熔化，或导致电池中绝缘材料的损坏。这会造成电池变形、泄漏、过热、爆炸或起火。如要将电池和设备直接焊接在一起，只能在端子引脚或导线上进行焊接。即使如此，电烙铁的温度必须低于 350 摄氏度而且焊接时间应小于 5 秒。不要使用电焊浴，因为装着电池的电路板可能停止运动或者掉进电焊浴中。而且不要使用过量的焊锡，因为焊锡可能流到板上不应该流到的部分，导致短路或者电池充电。

● 严禁使电池中泄漏出来的液体进入眼或嘴中

由于这种液体会导致严重的损害，万一它进入了您的眼睛中，请立即用足量的清水冲洗并咨询医生。同样，万一液体进入了您的口中，请立即用足量的清水冲洗并咨询医生。

● 将泄漏的电池置于远离明火处

如果怀疑有泄漏或者闻到了强烈的异味，将电池置于远离明火处，因为泄漏的液体可能起火。

● 安全说明

电池中含有锂，有机溶剂和其他可燃材料。因此，不恰当地处理电池可能导致电池变形、泄漏*、过热、爆炸或起火，这会导致身体伤害或设备问题。请仔细阅读以下说明以防止事故。* 泄漏的定义为液体非有意地从电池中漏出。