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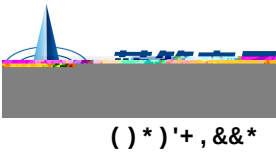
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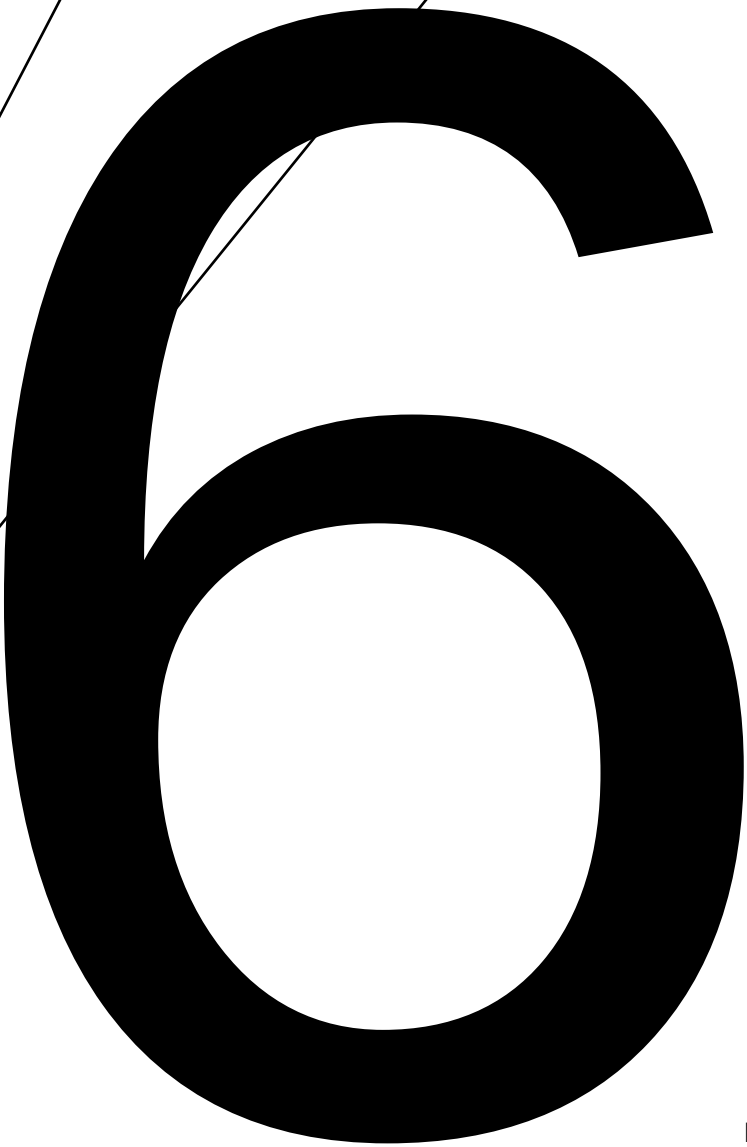
Notes:

- (1) The chip power consumption shall not exceed the maximum power consumed by the package.
- (2) This product has anti-

! L /Parameter	I H/Symbol	L L /Value	w I /Unit
V _{DD} input pin voltage	V _{IN}	-0.3 to +6	V'
V _M input pin voltage J	R _{VM}	-6 to +10	V
Power Dissipation	P _D	400	mW
Maximum Junction Temperature	T _J	125	°C
Lead Temperature	T _L	R 300	°C
Operating Junction Temperature	T _{opr}	-40 to +85	°C
Storage Temperature	T		

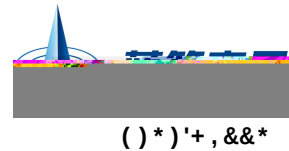


&K<0/ ;:-.98':&*'59' .1018;94.'						
Equivalent FET on Resistance	R _{DS}	V _{dd} =3.6V, I _{VM} =1A	15	25	40	mΩ
L / .3'8. F 7.3;8<3.'7358.48059'						
Over Temperature Protection	OTP		125	140	155	°C
Over Temperature Recovery Degree	OTPR		100	115	130	°C
(.:;@'80 F . '						
Overcharge Current Detection Delay Time	T _{OC}	V _{dd} =3.6V	5.6	8	10.4	ms
Overcharge Voltage Detection Delay Time	T _{CU}	V _{DD} =3.6V-0.4V	165	0	sc 950	47(186)JT175 BTm10.56 0 0 10.56 0



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The BRCL3230BME detects this voltage and releases the overcharge condition. Consequently, in the case that the battery voltage is equal to or lower than the overcharge detection voltage (VCU), the BRCL3230BME returns to the normal condition immediately, but in the case the battery voltage is higher than the overcharge detection voltage (VCU), the chip does not return to the normal condition until the battery voltage drops below the overcharge detection voltage (VCU) even if the load is connected. In addition, if the VM pin voltage is equal to or lower than the overcurrent 1 detection voltage when a load is connected and discharging starts, the chip does not return to the normal condition.

Note: If the battery is charged to a voltage higher than the overcharge detection voltage (VCU) and the battery voltage does not drops below the overcharge detection voltage (VCU) even when a heavy load, which causes an overcurrent, is connected, the overcurrent 1 and overcurrent 2 do not work until the battery voltage drops below the overcharge detection voltage (VCU). Since an actual battery has, however, an internal impedance of several dozens of mΩ, and the battery voltage drops immediately after y leA

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Because of the connection between the VM and the GND by the RVMS resistor ^o when the load is removed, the VM pin goes back to the GND potential since the VM pin is shorted the GND pin with the RVMS resistor. Detecting that the VM pin potential is lower than the overcurrent detection voltage (VIOV1), the IC returns to the normal condition.

Č Ä ¢ b Á ° Ř ř Ě r b ¼ b ɾ ¢ b ¾ b ¼ Ð Ƨ Ć] η 1 ċ ° Ů Ů ů Ů Á Ð Ò Ò ¢ b Ô ¾ À Á Á Ð
 Ć] ů ċ ° Ap] q ů η ¢ b , s¹ Ů ů ¢ b ® Ç ñ η Ō Ŭ ä Ř Ä ¢ b b Ô À ¾ ®
 η Ñ ¢ b Ě ° Ā r Ć N ĭ j ÷ Ð b ¼ | Î ¢ b Ě ½ ¾ b ¼ Ć] η 1 ċ Á Ř Ä ¢ b b Ô Ĥ t^a w ® ğ î 3 Ą b £
 ¢ b ´ Ů ² ² Σ | Î L Č Ä b Ô ¢ b ½ ¾ ° b £ b ¼] à & b £ Ć P³ Ž 3 Ä ¢ b Á ° Ř Ä ¢ b b Ô ½ ¾
 Š L Ý Þ ®

Abnormal charge current detection is leased when the voltage difference between VM pin and GND pin becomes higher than the charger detection voltage (VCHA) by separating the charger. Since the 0 V battery charging function has higher priority than the abnormal charge current detection function, abnormal charge current may not be detected by the product with the 0 V battery charging function while the battery voltage is low.

R í Ā r b ¼ | î Õ c □ ¥ b ¼ Ũ Ā · η ¶ p¹ Ū ° Ū Ū ū Ũ Á Ð ø Ò Õ c ½ ¾ À ã Á Ð Ũ Ĺ · η ¶ p¹ Ū °
 Ap]qŠ Ĭ Ā ā ŋ Ũ Ũ Ů Ó b ® † Ā r b ¼ à î Õ c □ ¥ b ¼ Ũ Ā · η ¶ p¹ Ū Ā ° ‡ Ř Ā ā ū Ƨ
 ŵ ° Ā ā Õ c η Õ Š ª ŵ ®

If voltage of VM pin is higher short circuiting protection voltage (SHORT) and it continues for the tSHORT or longer, the BRCL3230BME will stop discharging and battery is disconnected from load. This status is released when voltage of VM pin is higher than short protection voltage (VSHORT), such as when disconnect the load.

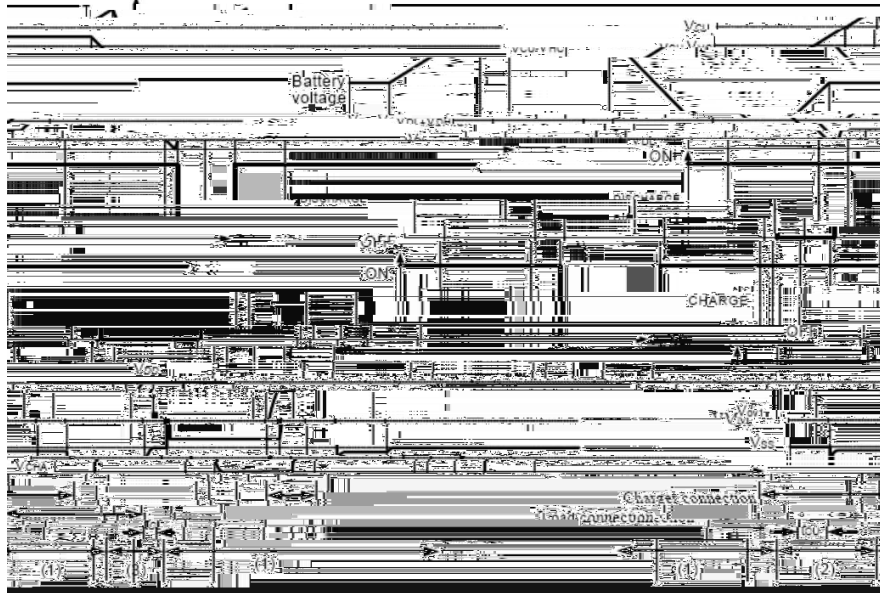
0V / \$R' ;88.3@' J;3?09?':<948059

f ´ Ú a î ŧ ů š Ó b ŕ 3Ă&b £ ³ Ž ů ¢ b ® t ¢ b Ě ů ž Á ° ě Ÿ Ò + ó b B s C p b £ ³ Ž ¢
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l ŷ ě 4 ě Ů Ÿ Ÿ ž š Ó b Ž & b £ ° L z ž ů ů 9 ¢ b ° Ć v ğ y b £ & Q Ÿ « : & ® Ě Ÿ ž b £ ě ` ž °
ę Ě × 5 5 & b £ v ſ Ā ě p z ž b 3Ă b £ ¢ b l & ´ Ú ° ll v p † ů b 3Ă b £ ¢ b l & ´ Ú ®
č 2 ě p z ž b 3Ă b £ ¢ b ´ Ú l ! p ¢ b Ò Ô ½ ¾ ´ Ú l z ² Σ Ů ! ® ě f 0 Ě a p z ž b 3Ă b £ ¢ b l
´ Ú & Ÿ] ° P b £ b ¼ Dž à & Á Dž ě dž . ¢ b ® b £ b ¼ à î Ò Ó b ½ ¾ b ¼ Ů Ě q Ů Ÿ Á ° L Ú ³
Ž ¢ b Ò Ô Æ a & ½ ¾ ®
č B ě t b £ L J ě 9 Ě ž ¢ ¥ b c Á ° Ć Ÿ b c j Ú L ě ³ ŧ Ć Ä Ť t ° f Á v L j Ó b ® Ř í t l Ć ě l j Ÿ Ÿ °
š Ě r s Ě b ¼ Ö î Ÿ ě b ¼



/ * 0 F 0 9 ? ' J ; 3 8

/ L / . 3 4 J ; 3 ? . ') 9 2 ' L / . 3 2 0 1 4 J ; 3 ? . ' (. 8 . 4 8 0 5 9



注：() 正常情况 () 过充电电压情况 () 过放电压情况

/ Overcharge L / . 3 2 0 1 4 J ; 3 ? . ' < 3 3 . 9 8 ' (. 8 . 4 8 0 5 9

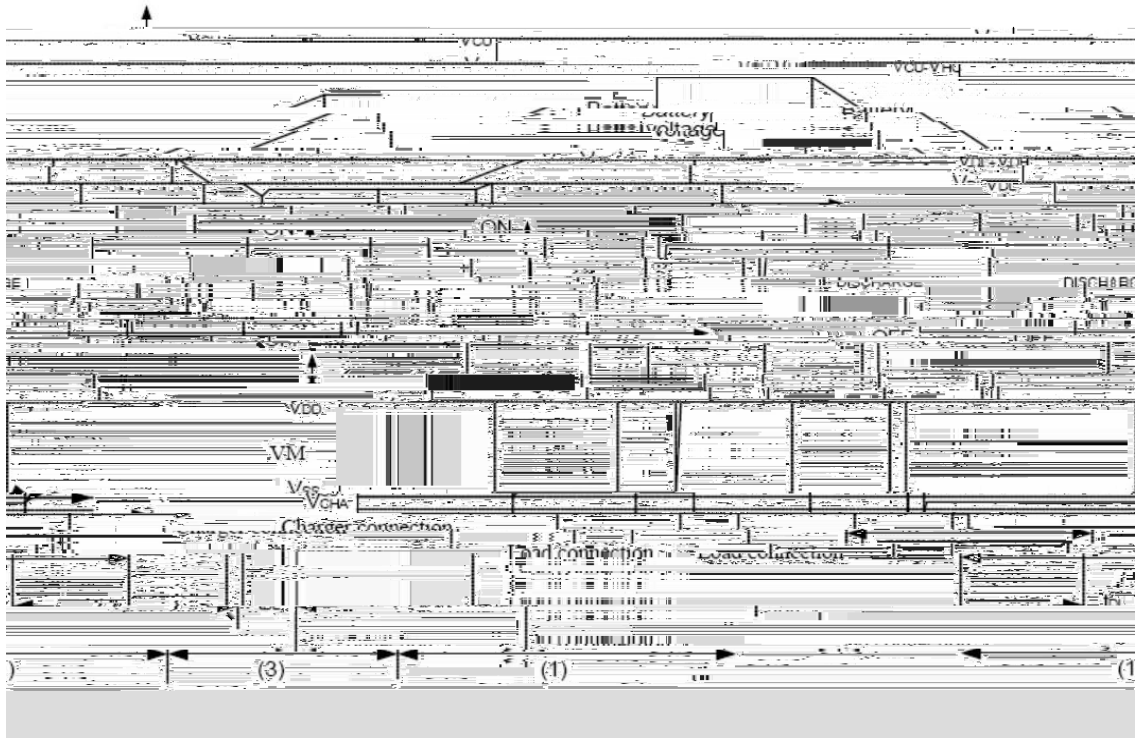


注：() 正常情况 () 过充电流状态 () 过放电流状态



/ * 0 F 0 9 ? ' J ; 3 8

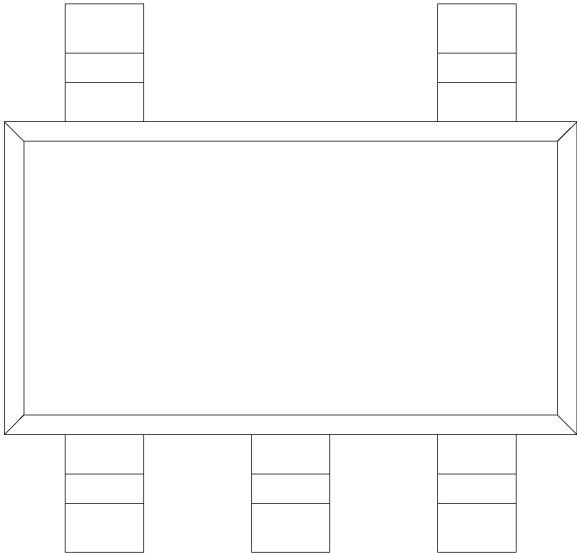
/ J ; 3 ? . 3 ' (. 8 . 4 8 0 5 9



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Rev.C Mar.-2020

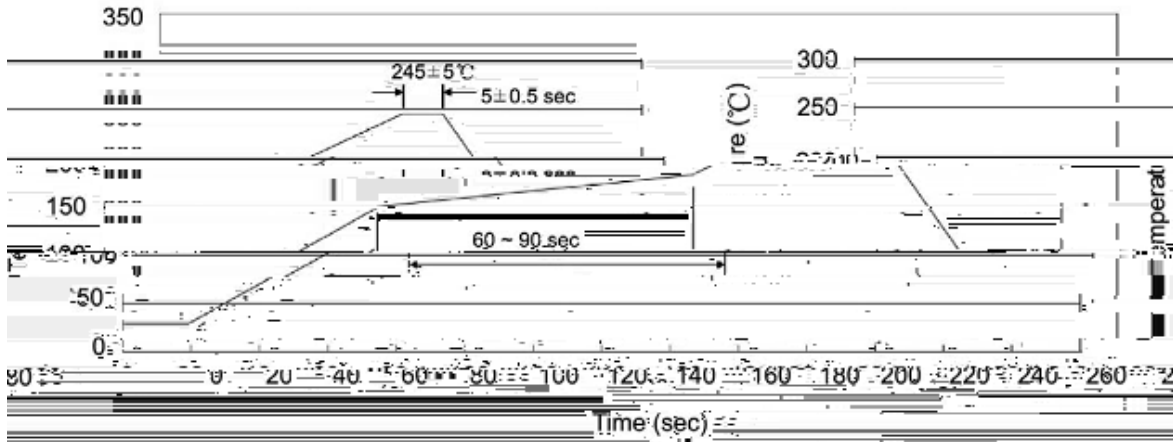
() *) '+ , && *

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B2B3A ŷ ä t u G H
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Note:
3230B: Product m3s

Temperature Profile for IR Reflow Soldering(Pb-Free)



ij J y

- 1 | Ö ö ý © 150~180 ů ° Á Ð 60~90sec;
- 2 | Ů Ľ ý © 245~5 ů ° Á Ð Ů Ů ä 5~0.5sec;
- 3 | ě Ě . Ş Ů ú Ů © ä 2~10 ů /sec.

Note:

- 1.Preheating:150~180 ů , Time:60~90sec.
- 2.Peak Temp.:245~5 ů , Duration:5~0.5sec.
3. Cooling Speed: 2~10 ů /sec.

''. '' .1018;94.'85'+5-2.309?', . ;8'*.18' 592080591'

ý © ý 260~5 ů

Á Ð ý 10~1 sec.

Temp.:260~5 ů

Time:10~1 sec

''. '' A;4>;?09?'+A& Ů'

Ů Ů - k / REEL

Package Type	Units			Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Boxes	Units/Outer Box	
	/	/	/	/	/	Reel Inner Box Outer Box