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200h tpp : : /wf s b b r .. . . . . . . . . . .
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描述 / Descriptions

BRCL3230BZF	/	BRCL3230BZF
MOSFET		
BRCL3230BZF	DFN2×2-6L	
BRCL3230BZF		

c2□. mT o - . w□s□w.hs b□ w. .2 2. 0□ s 0 . w 0 . / s. 02 r N ph r □s.f 0□s .
hs 0:b0 mT o - .b 0 w. b□ .h : □s. c 2 2N bb s b . 0 □. □0□b0 .b sb 0w.
. □ .b sb 0w.
mT o - . w.h 0 0 . . 0s Nwr . BoXoNT.h b □.r □w. 0 . □ .w 0 . . r 0□ .
wh b□. /f 0□s.h b . mT o - .2 w. .02□.hs 0:b0 . / b0 w.s□ s□ . .02□.f 0□s . hh b 0 .
b . □sb2 s . □s wb2 s . □sb ss□ 0 . .w2 s□b sb 0 .hs 0:b0 .□0b c2□. : .
w0 f .b ss□ 0 s w. 0□□.b ss□ 0/s r .02□.b□ .: 2 □. .w0 s □ c2□. □ b□. w. 0 .0 s □0□ . /s.
0 .b□ .s.h2 □w.f 0 w. / s. . 02□.s.TN . .TN .f 0□s Nh : □s□ . / sr 0 . hh b□w.
s□ s . NO□sr .f 0□s . /□ .

特征 / Features

25mΩ MOSFET
DFN2×2-6L
RC

2 1 2

0V

3.0uA, 1.7uA;

0 s 0. b .h : s. c.: 02. Q /o r . B .

0s Nwr . B o X oN T.h b .

0 s . 0 s 0 . m.: 02 0 .h sh2 s . b w.

sN r h s 0 s. s 0 b0 ..

sb2 s .m ss 0 s 0 b0 ..

c 2 s Nw h. sb ss 0 0 b0 t. s wb2 s .m ss 0 s wb2 s .m ss 0o T . 2 s0
m sb 0 ; .

m2 s s. 0 b0 ./ b0 .

- .f 00 s .b2 s ./ b0 . .0r w. s. s s 0 . w 2N bb s b . 0 .
0 b0 .

T : .m ss 0m w r h0 . h s 0 . .t. - .0 h : sN : . .t. .0 h .

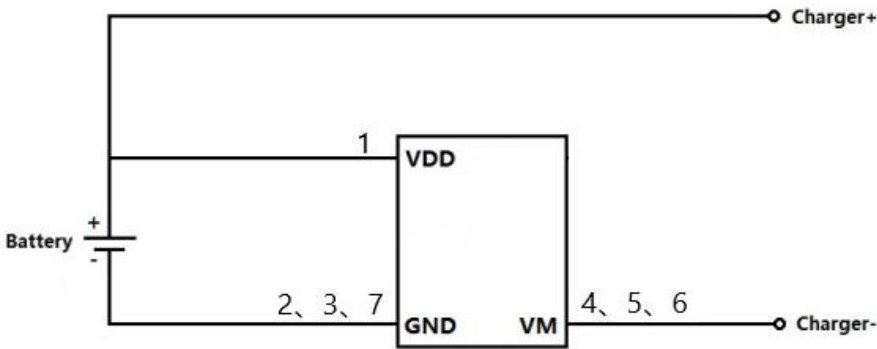
. s b0.

用途 / Applications

□ Nm □ . 02 r N . f 00 □ s . h b . T 02 r N r □ s . f 00 □ s . h b .



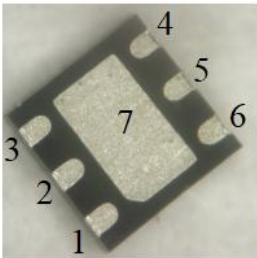
典型应用电路图 / Typical Application



(1)
(2)

B 0w: .
.c2.b2 h.h : s.b w r h0 .w2 . 0 b .02.r r r .h : s.b w r .f .02.h b .
o .c2 w.hs b02 w. 0Nw0 0b.hs 0b0 ./ b0 .f 0 . 0 b .02.r r r .b h b0 . /02.
hs b00 .: 02w0 .w0 0b. b0sb0 .

引脚排列 / Pinning



Pin Number	Pin Name	Pin Description
1		: s. h h .
2 3 7	B	s .b b002. 0 0.0sr . /02.f 00s .0 .02 w.h .
4 5 6		c2. 0 0.0sr . /02.b2 s s.c2. 0s . c.w. 0b2. b b0w.02 w.0sr .0 . B .

印章代码 / Marking

. s . w0s b0 w.



极限参数 / Absolute Maximum Ratings(Ta=25°C)

p s r □0□s	p r f . .	p □. .	p 0
. h 0h . 0 □.	B.	N .0 . .	
. h 0h . 0 □.	.	N .0 . - .	.
: □s. ww h 0	.	- - .	r .
r r . b0 .c□r h□s 0 s□	c .	o .	°C.
T□ .c□r h□s 0 s□.	c T.	- - .	°C.
h□s 0 . b0 .c□r h□s 0 s□	c h s*	N - .0 . .	°C.
0 s □.c□r h□s 0 s□	C w0 .	N .0 . - .	°C.
b □.c 2□sr . □ww0 b□	.	o - .	°Cp .
	b.	- .	°Cp .
.	.	o - - - .	.

电性能参数 / Electrical Characteristics(除非特别指定 , Ta=25°C)

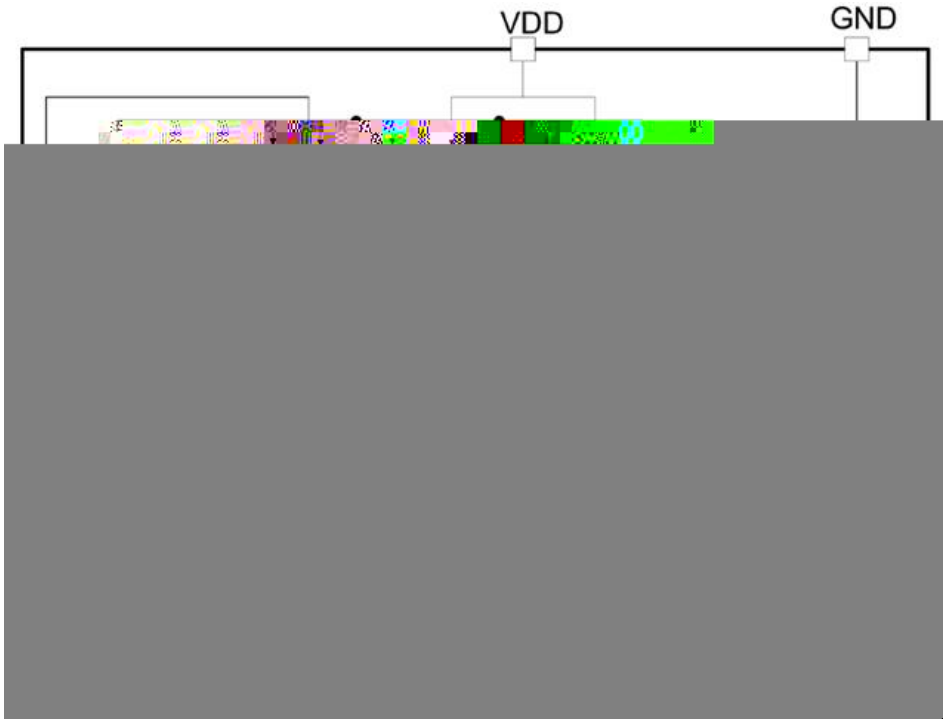
p s r □0□s	p r f .	pc□w0	p . .	pc h.	p . .	p 0
Detection voltage						
□sb2 s □. □0□b0 . 0 □.	m .	.	o .	- .	.	.
□sb2 s □. □□ w□. 0 □.	m T.	.	- .	- .	.	.
□s wb2 s □. □0□b0 . 0 □.	T.	.	o - .	o - .	o - .	.
□s wb2 s □. □□ w□. 0 □.	.	.	o - .	- - .	- .	.
m2 s □s. □0□b0 . 0 □	m .	.	N .	N .	N .	.
Detection current						
□sb2 s □.m ss□ 0 □0□b0 .	mm.	. .	.	.	.	.
□s wb2 s □.m ss□ 0 . □0□b0 .	.	.	.	.	.	.
□s wb2 s □.m ss□ 0b. □0□b0 .	o.	.	.	.	.	. .
T . 2 s0Nm sb 0 . □0□b0 .	c.	.	o.	.	o .	.
Static current						
m ss□ 0m w r h0 . .B sr . h□s 0	.	, - .	.	- .	- .	.
m ss□ 0m w r h0 . .h : □s. :	B.	o . / 0 .	.	.	o .	.
.	.	.	.	.	.	.



电性能参数 / Electrical Characteristics(除非特别指定 , Ta=25℃)

Equivalent FET on Resistance							
□ Q c . . □ ww0 b□ .	.	,	.	.	o .	- .	r .
Over temperature protection							
□ s.c□ r h□ s 0 s□ . s 0□ b0 .	c .	.		o .	- .	.	℃.
□ s.c□ r h□ s 0 s□ . □ b □ s . □ s□ .	c . .	.		- - .	.	- .	℃.
Delay time							
□ sb2 s □ .m ss□ 0 □ 0□ b0 . □ .c r □ .	C mm.	.	.	.	.	- .	r w.
□ sb2 s □ . 0 □ . □ 0□ b0 . □ .c r □	C m .	.	.	.	.	.	r w.
□ s wb2 s □ . 0 □ . □ 0□ b0 . □ .c r □	C T.	o - .	o .	.	.	.	r w.
□ s wb2 s □ .m ss□ 0 . □ 0□ b0 . □ .c r □	c .	.	.	.	.	- .	r w.
□ s wb2 s □ .m ss□ 0□ . □ 0□ b0 . □ .c r □ .	C o.	.	.	- .	.	.	r w.
T . 2 s0Nm sb 0 . □ 0□ b0 . □ .c r □	C c.	.	.	.	- - .	- - .	w.

功能框图 / Functionl Block Diagram



MOSFET

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VCU ,

2008 tpr : : /wf s b b r 5.p.13

BRCL3230BZF

过放电流情况 / Overcurrent Condition

1

2

BRCL3230BZF

FET

VM GND RVMS

VM VDD RVMS VM

1

2 .02 . wb2 s . b ss Q f b r w . .0 . s.2 2 s.02 . wh b / . . 02 . . h . 0 . w .
 .0 . s.2 2 s.02 .02 . sb ss Q 0 b0 . 0 . s . wb2 s . s. sr . b 0 .
.02 .w0 0 .b 0 w./ s.02 . sb ss Q 0 b0 . .0r . s. s.02 . mT o - .0 s w. //
02 . wb2 s . b 0s . c.0 .w0 h. wb2 s .c2 w.b 0 . w.b . sb ss Q b 0 . c2 .
sb ss Q b w. sb ss 0. s. .w2 s0 sb 0 .c2 . . B .h w. s.w2 s0 . 0s .
f .02 . .sww0 s. s.02 . sb ss Q b 0 . 2 . . w.b b0 .02 . .h . 0 .
w.02 . . 0 . .0 .02 . .
b w. /.02 .b b0 .fQ .02 . . .02 . B .f .02 . .sww0 s : 2 .02 . . w.
sr .02 . .h . wf b .0 .02 . B .h 0 0 .w b.02 . .h .w.w2 s0 .02 . B .h .: 02.02 .
.sww0 s. 0 b0 .02 0 02 . .h .h 0 0 . w. : s.02 .02 . sb ss Q 0 b0 . 0 .
.02 .m.s0 s w.0 .02 . sr .b 0 .

异常充电电流检测 / Abnormal Charge Current Detection

(TCU) BRCL3230BZF
 VM GND
 (VCHA)
 0V
 0V

负载短路情况 / Load Short-circuiting Condition

VM	VSHORT	tSHORT
BRCL3230BZF	VM	VSHORT
/ . 0 □. / . . h . w. 2 2□s. w2 s0 b sb 0 . hs 0□b0 . 0 0 □. c . . 0 b 0 □w. / s. 02□.		
0 c. s. □s. 02□. mT o - .: .w0 h. wb2 s . . f 00□s. w. wb □b0□ ./s r . .c 2 w.		
w0 0 w. w.s□ w□ .: 2□ . 0 □. / . . h . w. 2 2□s. 02 .w2 s0 hs 0□b0 . 0 0 □. c .w b2. w.		
: 2□ . wb □b0 .02□. .		

0V 电池充电功能 / 0V Battery Charging Function

(1)

OV

VDL

IC

(2)

OV

IC

OV

VDL

(3)

VM

GND

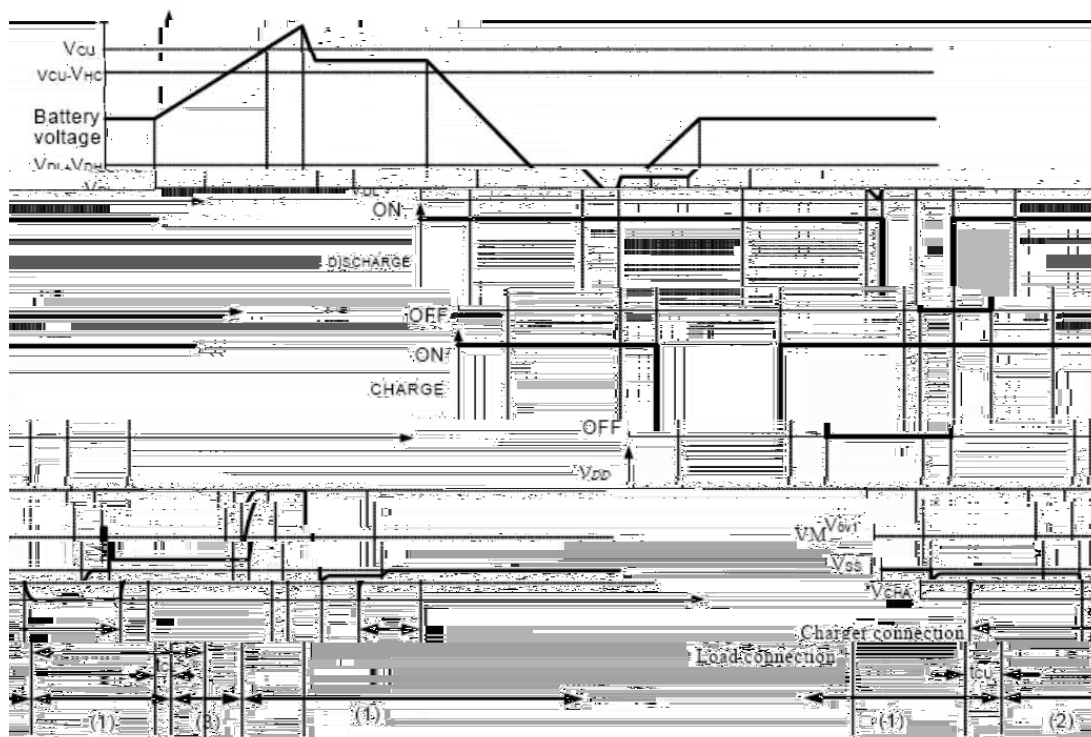
VM

GND

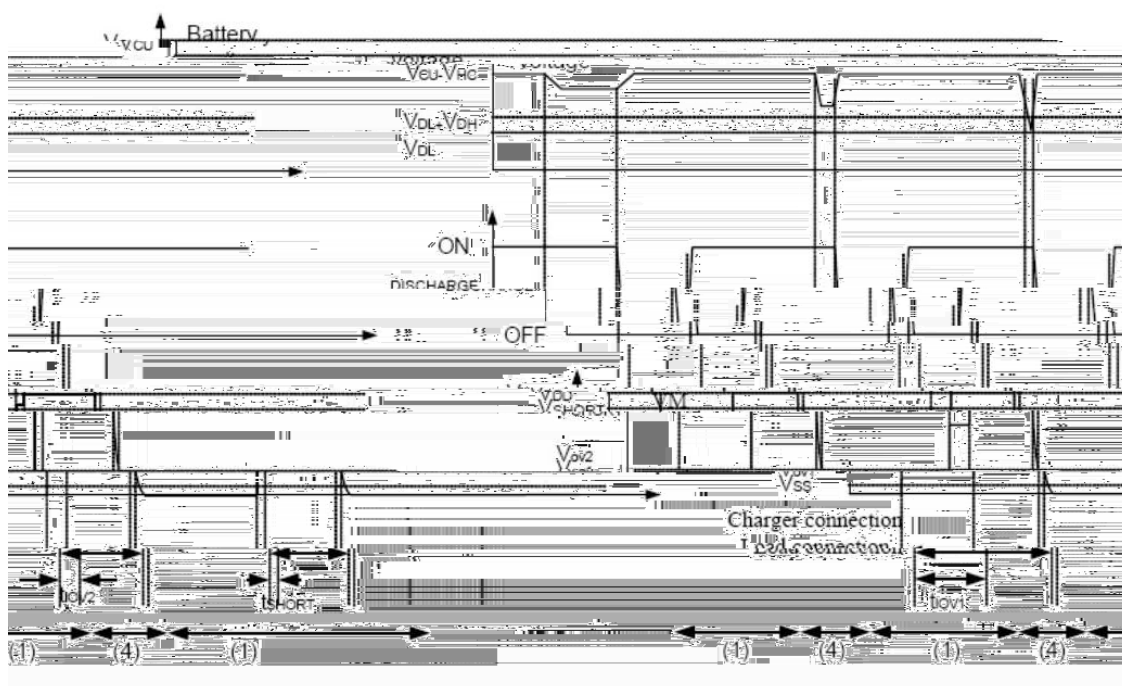
c 2 w/ b0 . f w.02 .b2 s . / . b b0 .f 00s .: 2 w. 0 . w.- .f .w /N wb2 s . 2 . b b0w.0 . .b2 s s.02 . wb2 s .b 0s . c. w. //. .02 .b2 s .b ss Q/ : w.02s 2.02 . 0s .h s w0b. . .02 . wb2 s .b 0s . c. /02 .f 00s . 0 .f b r w. .0 . s.2 2s. 02 .02 . s wb2 s s.s w. 0 . T .02 . sr .b 0 .s0 s w. B 0w . . r .f 00s .hs sw. . 0sb r r .b2 s . / .b r h 0 . wb2 s .f 00s w. w. s /s.0 .f 00s .hs sw.f / s.02 .w b0 . /.- .f 00s .b2 s . / b0 . o .c2 .- .f 00s .b2 s . / b0 .2 w.2 2s.hs s0.02 .02 . f sr .b2 s .b ss Q 0b0 . / b0 .m w 0 . .hs b0 : 02 .02 .- .f 00s .b2 s . / b0 .b2 s w. .f 00s . f sr .b2 s .b ss Qb 0f . 0b0 . s .02 .f 00s . 0 .w. : . 2 .f 00s .w.b b0 .0 .02 .m. / s.02 . / sw00r .02 .m.r . 0 0s.02 . sr .b 0 . : 2 b2 . wb2 s .w.h ww f . .02 .w.b w .w002 . .h . 0 . .0 .02 . B . 0 .w2 s002 . . B .h w. s.b b0 .b2 s s.0 .0 0s.02 . sr .b 0 .

时序图 / Timing Chart

过充和过放电压检测/Overcharge And Overdischarge Detection

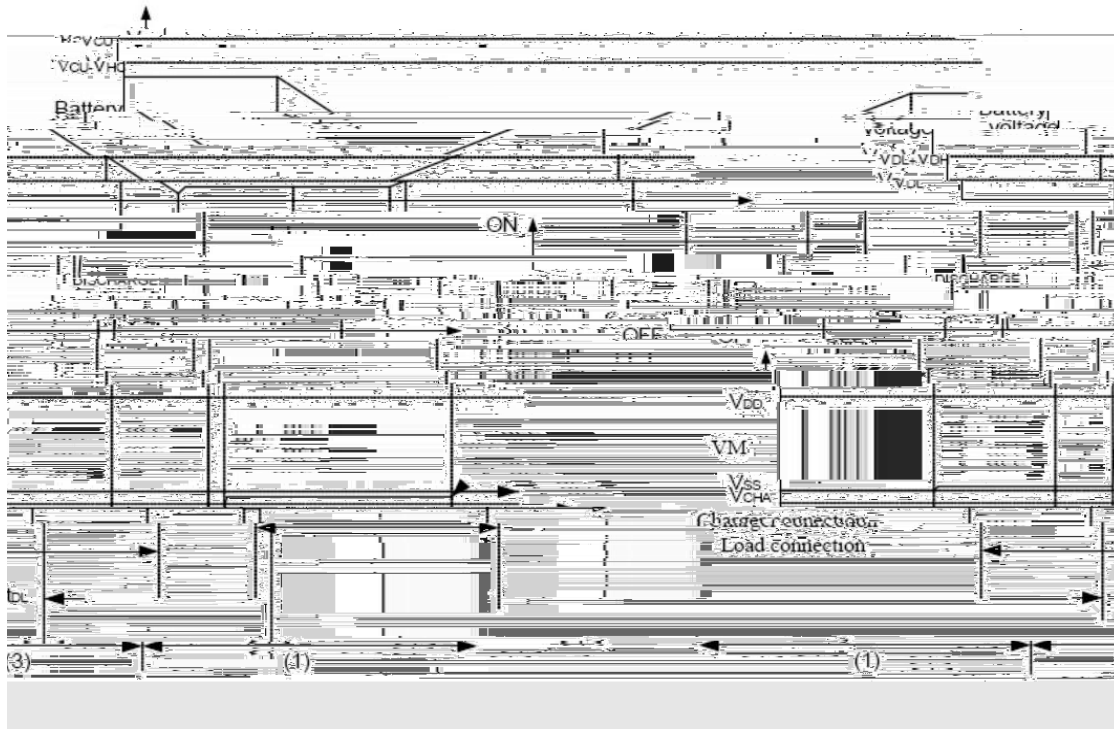


过放电流检测/Overdischarge Current Detection

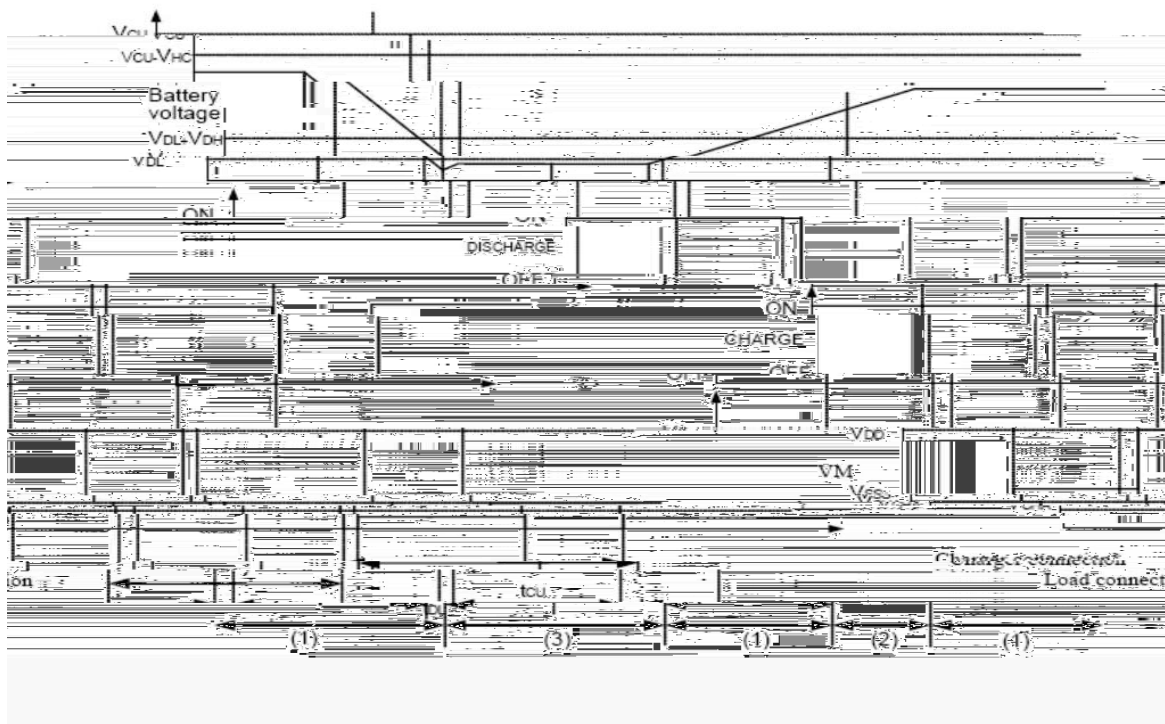


时序图 / Timing Chart

充电器检测/Charger Detection



异常充电电流检测/Abnormal Charge Detection

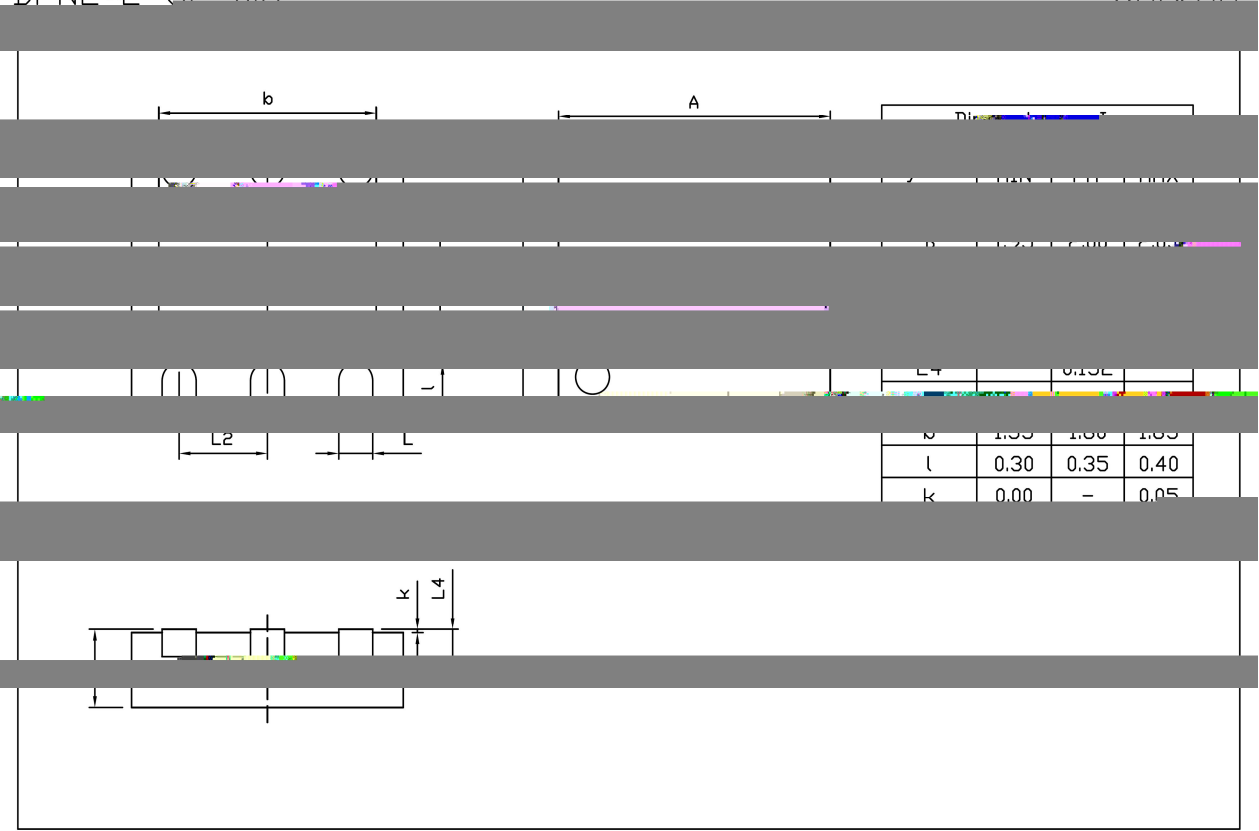


B 0 wt. .B sr .b 0 . o . □ sb 2 s □. 0 □.b 0 . . □ s wb 2 s □. 0 □.b 0 . .
□ sb ss □ qb 0



外形尺寸图 / Package Dimensions

DFN2×2-6L-0.5Unit:mm

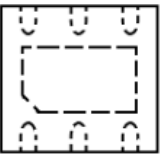




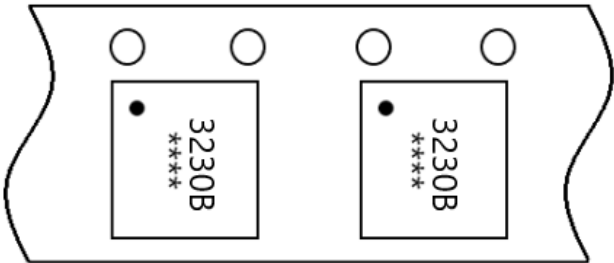
印章说明 / Marking Instructions



正面俯视图



正面透视图



编带示意图

3230B

B 0 t.

o - t. . s b0c h□ .

t. . . T 0B .m □ .b □.b2 □.: 02.T 0B .

BRCL3230BZF

□ .B N