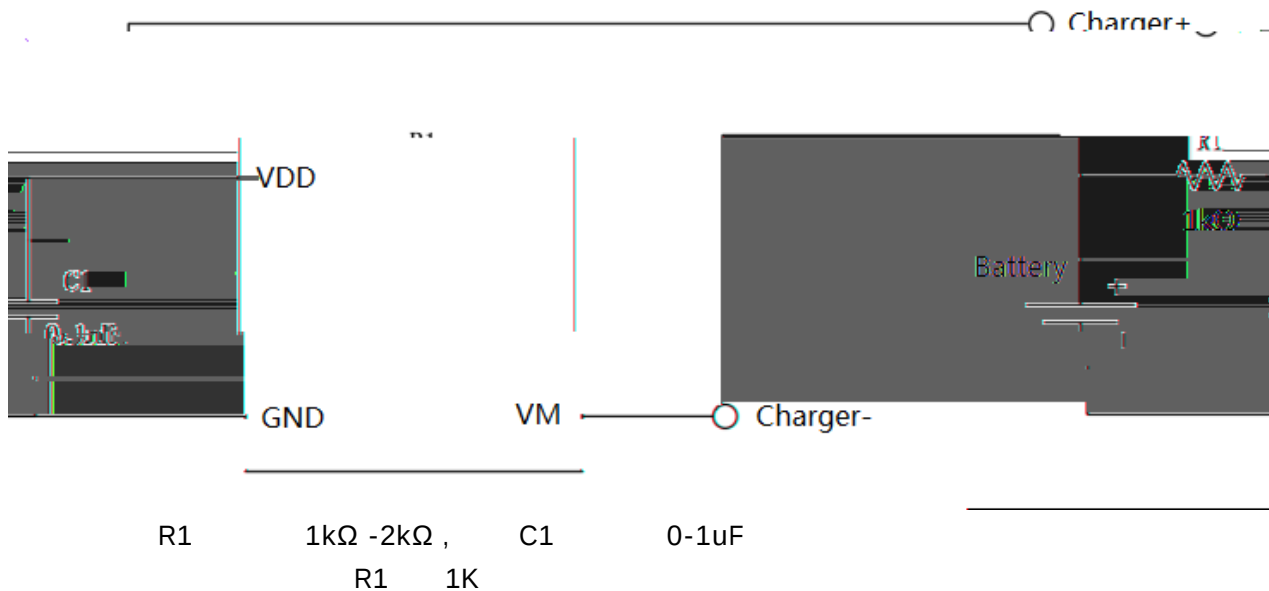


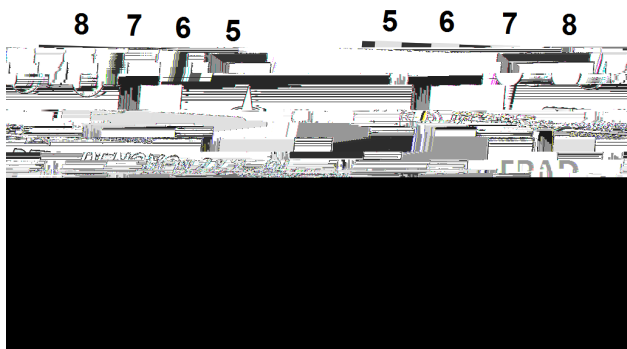
BRCL3130DZZ MOSFET
MOSFET

BRCL3130DZZ DFN2×2-8L

- ◆ 16mΩ MOSFET
- ◆ DFN2×2-8L
- ◆
- ◆
- ◆ 3.5 μA
- ◆ 0.6 μA
- ◆

Single lithium ion rechargeable battery pack, single lithium polymer rechargeable battery pack.





Pin Number	Pin Name	Pin Description
1	VDD	
2,3,4	GND	
5,6,7,8	VM	
EPAD	GND	

/Parameter	/Symbol	/Value	/Unit
V _{DD} input pin voltage	V _{IN}	-0.3 to +8	V
V _{VM} input pin voltage	V _{VM}	-8 to +10	V
Maximum Junction Temperature	T _J	-40 to +145	
Storage Temperature	T _{stg}	-55 to +145	
ESD HBM Mode	ESD	± 4000	V

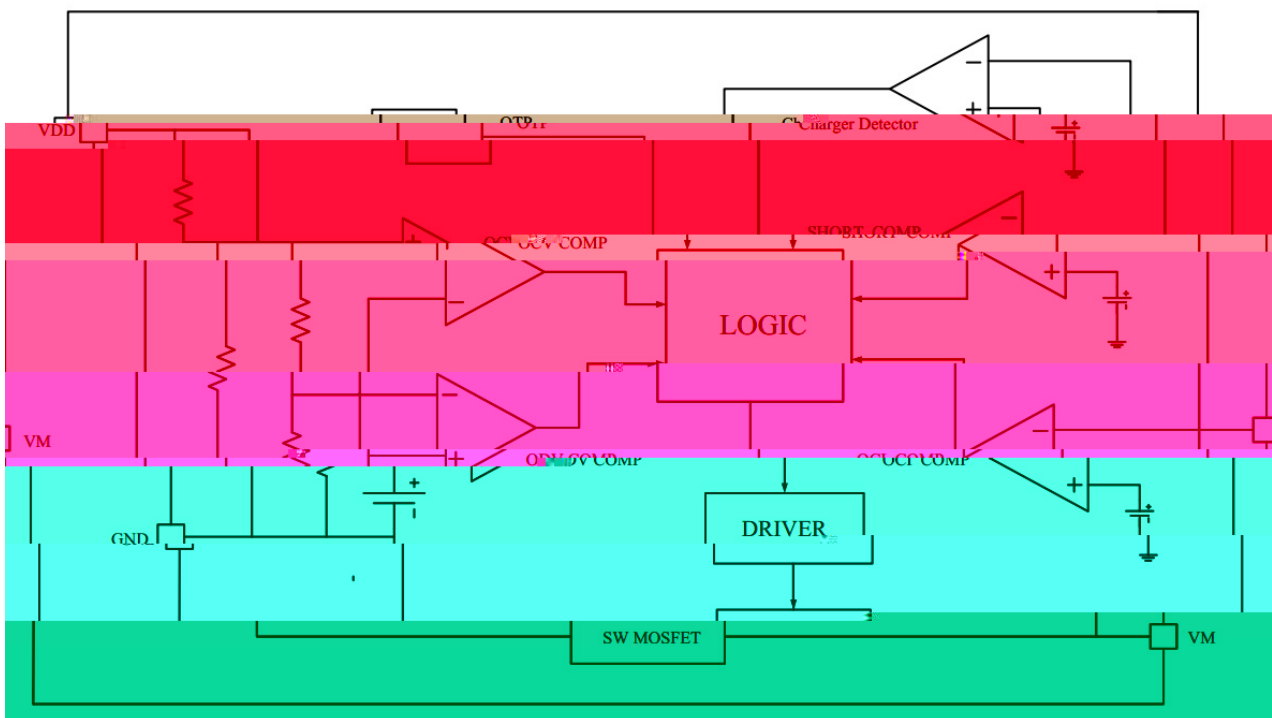
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Supply Voltage	V _{DD}		0		6	V
Charger input voltage	V _M		-6		6	V
Overcharge Detection Voltage	V _{OCV}		4.25	4.3	4.35	V
Overcharge Release Voltage	V _{OCR}		4.04	4.10	4.16	V
Overdischarge Detection Voltage	V _{ODV}		2.30	2.40	2.50	V
Overdischarge Release Voltage	V _{ODR}		2.90	3.00	3.10	V
Overdischarge Current Detection	I _{OCI}		9	11.5	14	A
Load Short-Circuiting Detection	I _{SHORT}		15	25	35	A
Overcharge Current Detection	I _{CHA}		7	10	13	A
Current Consumption in Normal Operation	I _{OPE}	V _M =0V		3.5	7	μA
Current Consumption in Dormancy	I _{PDN}	V _{DD} =1.8V		0.6	1.5	μA
Internal pull-up current	I _{PU}			14		μA
Internal pull-down current	I _{PD}	V _M =1V		14		μA
Equivalent FET on Resistance	R _{DS}	I _{VM} =1A	12.5	16	18	mΩ

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Over-temperature protection	OTP			145		
Over-temperature protection release temperature	OTPR			120		
Overcharge Voltage Detection Delay Time	T _{OCV}			100		ms
Overdischarge Voltage Detection Delay Time	T _{ODV}			100		ms
Overdischarge Current1 Detection Delay Time	T _{IOV1}			8		ms
Overdischarge Current2 Detection Delay Time	T _{IOV2}			2		ms
Load Short-Circuiting Detection Delay Time	T _{SHORT}			150		μs

* (OTP)

OTPR

*



/

BRCL3130DZZ

MOSFET

16mΩ

BRCL3130DZZ

/

/

(V_{OCV})

(T_{OCV}) BRCL3130DZZ MOSFET

(T_{OCV})

1 VM (V_{CHA}) (V_{OCR})

2 (V_{OCV})

/ Overcharge Current Condition

I_{CHA} (T_{OCI}) MOSFET

BRCL3130DZZ

/

(V_{ODV})

(T_{ODV}) BRCL3130DZZ

MOSFET

(I_{PDN}).

VDD 2.3V ()

VDD 2.4V ()

(V_{ODR}) BRCL3130DZZ

/

VM

VM

/

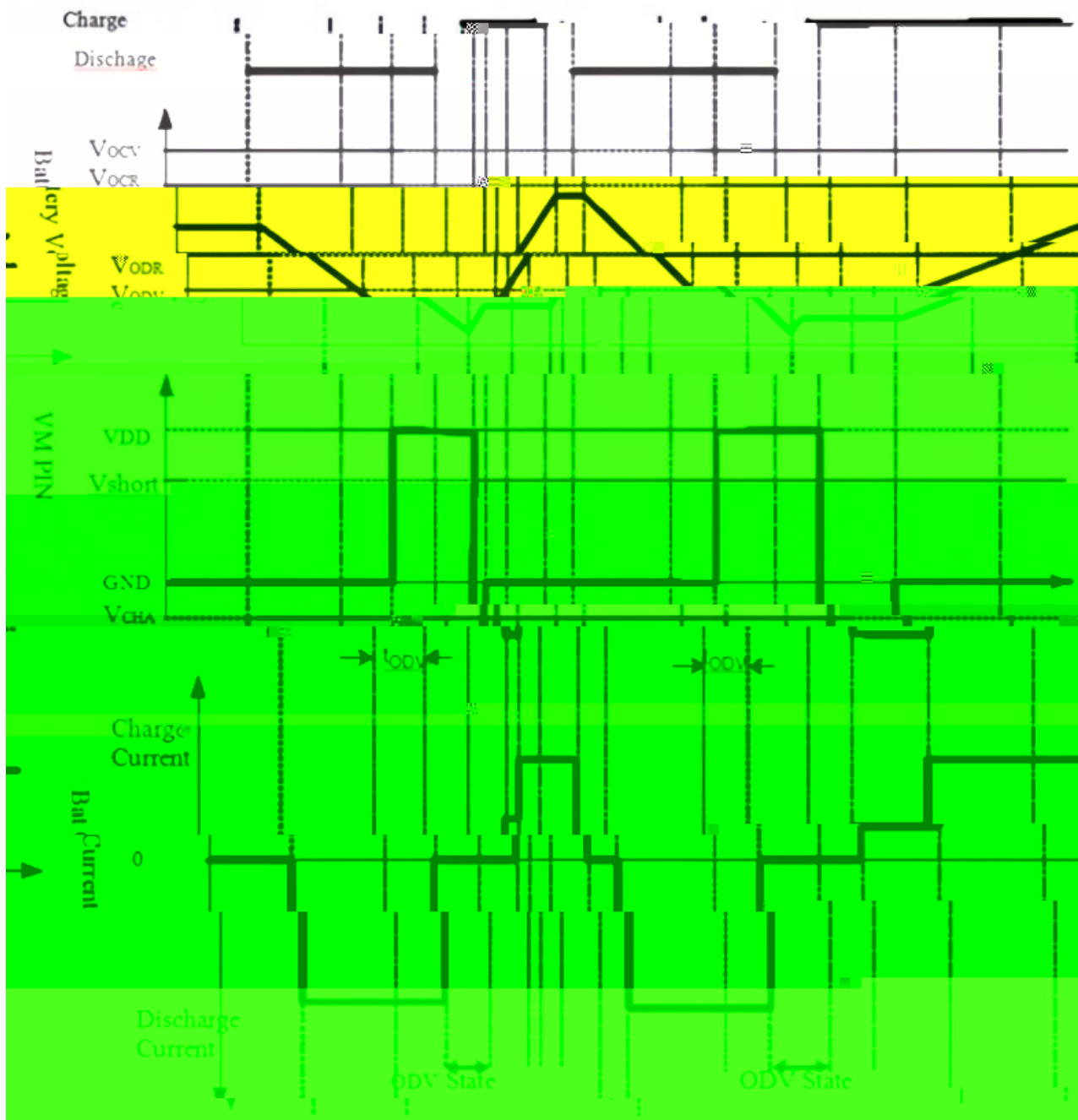
VM (V_{SHORT})

T_{SHORT} VM

I		VM	(V _{CHA})
(V _{ODV})		BRCL3130DZZ	
0V	I		

/

→ → / → →

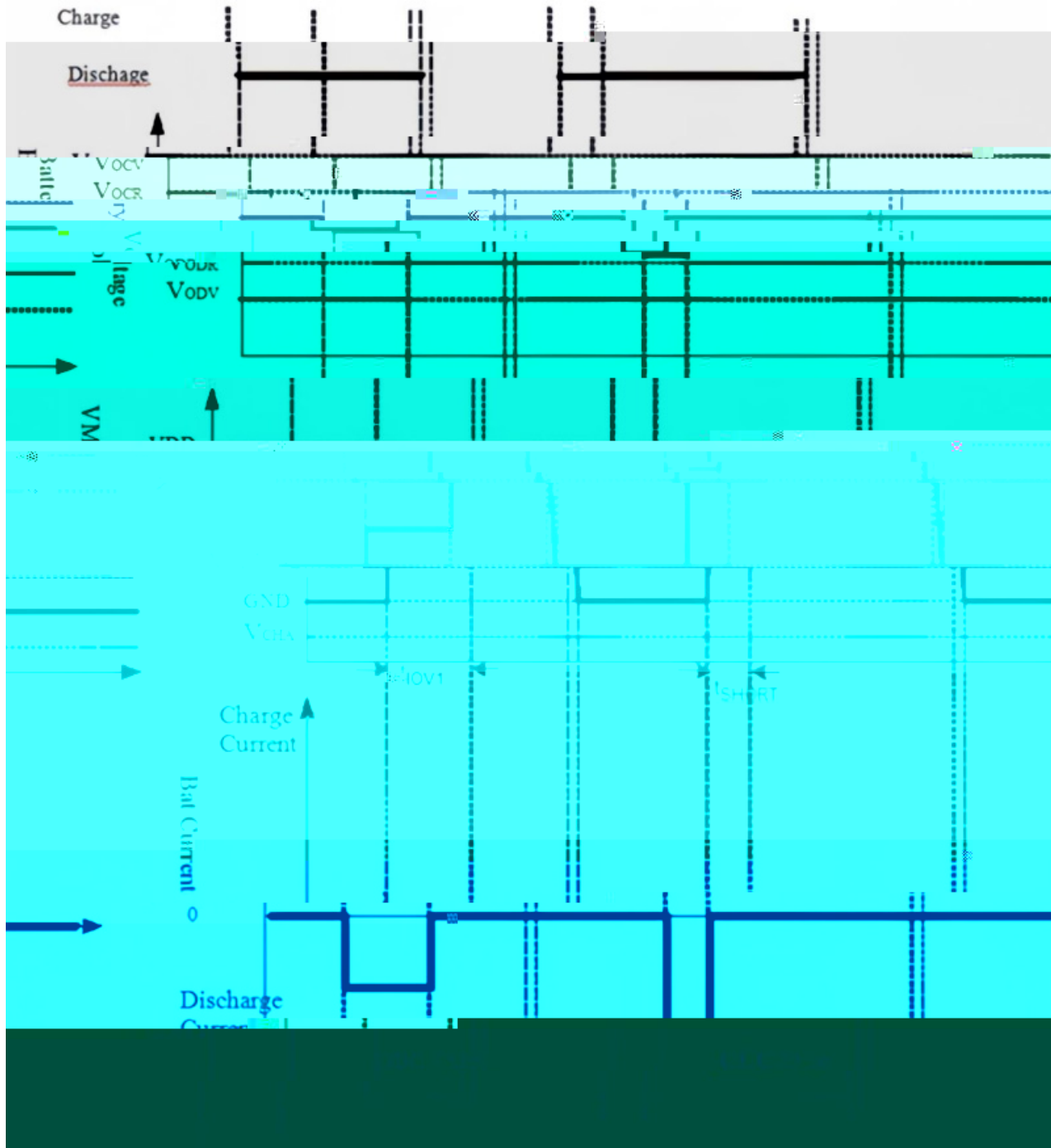


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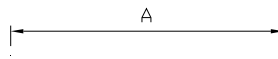
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DFN2×2-8L-0.75

Unit:mm



Dimensions

Rev.00 202012



3130D
