

BRCL4058NZZ-4.2

Rev.B Aug.-2025

/ Descriptions

BRCL4058NZZ	1A	/	BRCL4058NZZ
P-MOSFET		4.2V	1/10
BRCL4058NZZ			

/ Features

6.8V OVP
VDD 36V

0V
1A
/ /

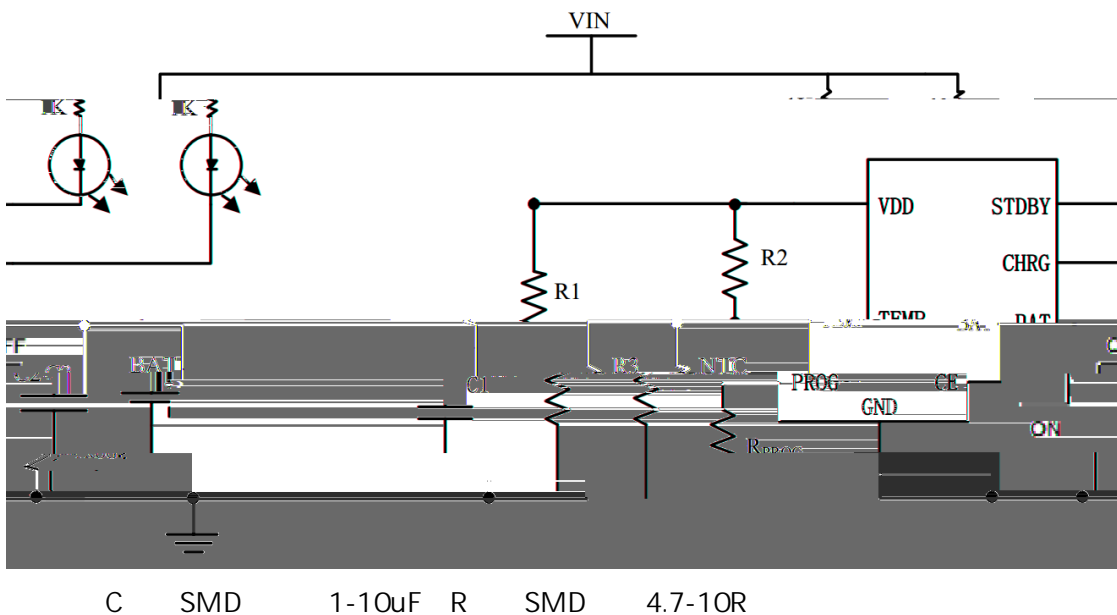
2.8V

DFN 2×2-8L
RoHS

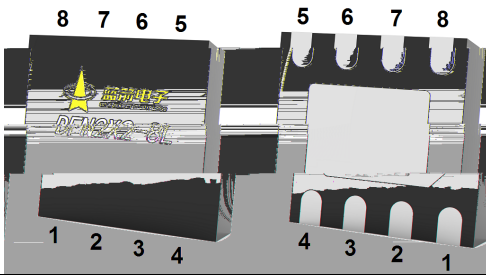
/ Applications

USB

/ Application Circuit



/ Pinning



PIN Num.	Symbol	Function
1	TEMP	
2	PROG	
3	GND	
4	VDD	5V
5	BAT	
6	STDBY	
7	CHRG	
8	CE	

/ Absolute Maximum Ratings(Ta=25)

PARAMETER	SYMBOL	RATINGS	UNITS
VDD/CHRG/STDBY Pin Voltage	$V_{VDD/CHRG/STDBY}$	-0.3~36	V
VCE Pin Voltage	V_{CE}	-0.3~32	
BAT Pin Voltage	V_{BAT}	-5~15	
PROG Pin Voltage	V_{PROG}	-0.3~6	
TEMP Pin Voltage	V_{TEMP}	-0.3~15	
Operating Ambient Temperature Range	T_{OP}	-40~+85	°C
Storage Temperature	T_{stg}	-55~+150	°C
Lead Temperature (Soldering, 10s)	T_{solder}	260	°C
ESD	HBM	2000	V
	MM	200	V

BRCL4058NZZ-4.2
Rev.B Aug.-2025

BRCL4058NZZ-4.2

Rev.B Aug.-2025



DATA SHEET

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Indicator Pin Status CHRG/STDBY						
CHRG Pin Output Current	I _{CHRG}	V _{DD} =5V;V _{CHRG} =1V	1	2.5	5	mA

C

BRCL4058NZZ-4.2

Rev.B Aug.-2025



DATA SHEET

/ Function description

BRCL4058NZZ / BRCL4058NZZ
 USB AC 1A , 36V 6.8V

VDD UVLO PROG 1%
 BAT 2.8V,

1/10
 BAT 2.8V
 BAT BRCL4058NZZ
 1/10

$I_{CH} = 1000/R_{PROG}$ I_{CH}
 R_{PROG} R_{PROG} 200mA
 $R_{PROG} = 1000/0.2 = 5K$
 R_{PROG} 1%
 R_{PROG}

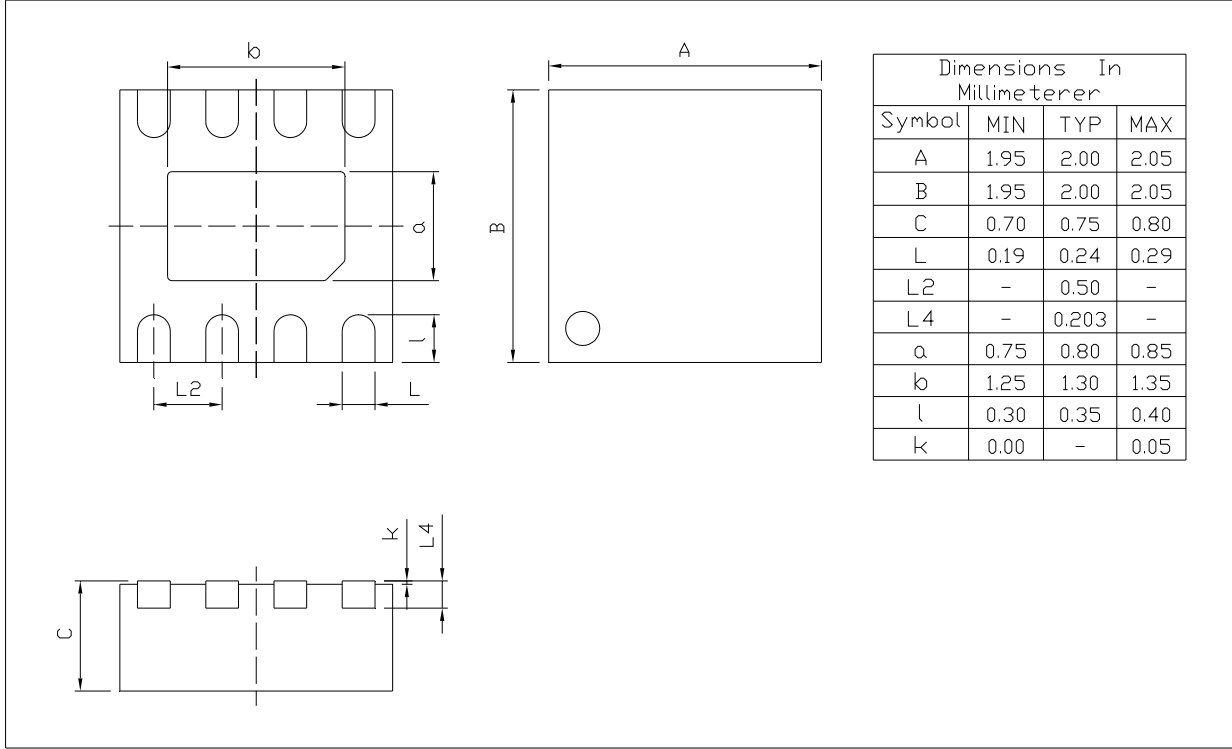
$R_{PROG}(K)$	$I_{CH}(mA)$
1	1000
1.2	830
1.5	666
5	200

BAT BRCL4058NZZ 2ms $T_{RECHARGE}$
 4.05V 80 90

/ Package Dimensions

DFN2x2-8L-0.75

Unit:mm



Rev.00 202012

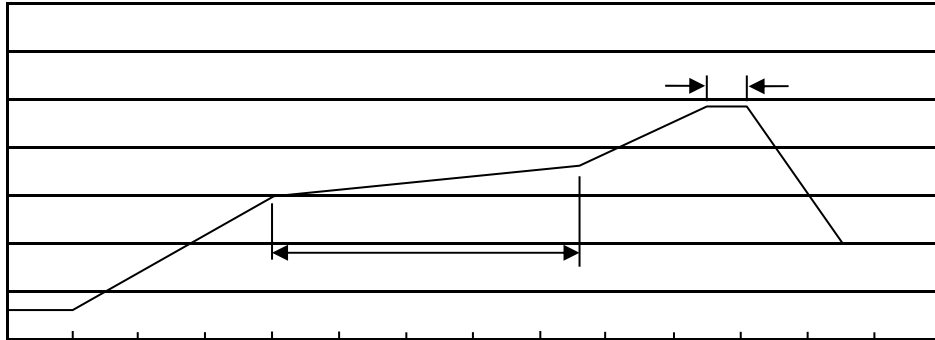
/ DFN2 2-8L Marking Instructions



4058N
XX

BRCL4058NZZ-4.2	4058N-42/****

() /



Note:

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

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
DFN2x2-8L	4,000	10	40,000	4	160,000	7 x8	210x205x205	445x435x230

/ Notices

All information provided in this document is subject to legal disclaimers.