

# BRCL4058MME-4.2

Rev.B Dec.-2024

## / Descriptions

BRCL4058MME-4.2	30V	OVP	500mA
/			
BRCL4058MME-4.2	P-MOSFET		
	4.2V		
BRCL4058MME-4.2			0.1uA
BRCL4058MME-4.2			
BRCL4058MME-4.2	USB		

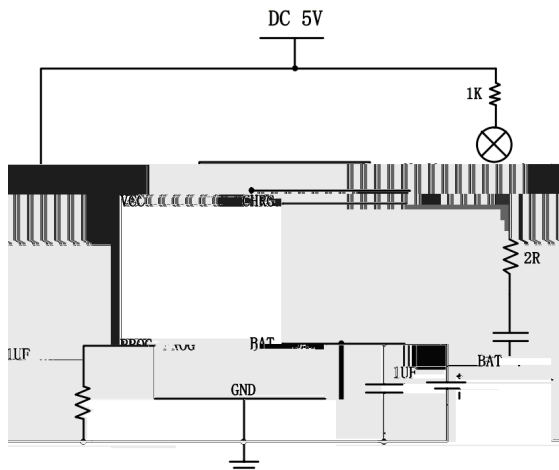
## / Features

30V  
6.8V OVP  
30mA-500mA  
/  
 $\pm 1\%$   
2.8V  
C/10  
  
BAT  
SOT23-5  
RoHS

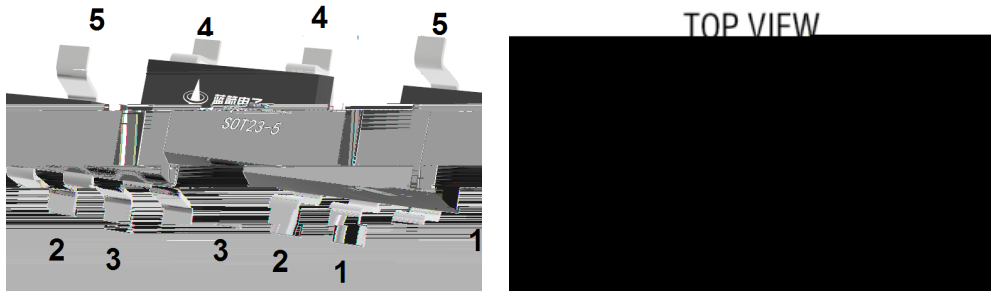
## / Applications

GPS

## / Application Circuit



## / Pinning



PIN Num.	Symbol	Function
1	CHRG	
2	GND	
3	BAT	
4	VCC	
5	PROG	

## / Absolute Maximum Ratings(Ta=25 )

PARAMETER	SYMBOL	RATINGS	UNITS
VCC/CHRG Pin Voltage	V <sub>VCC/CHRG</sub>	-0.3~30	V
BAT Pin Voltage	V <sub>BAT</sub>	-5~13	
PROG Pin Voltage	V <sub>PROG</sub>	-0.3~6	
Operating Ambient Temperature Range	T <sub>OP</sub>	-40~+85	°C
Storage Temperature	T <sub>stg</sub>	-55~+150	°C
Lead Temperature (Soldering, 10s)	T <sub>solder</sub>	260	°C
Junction-to-Ambient	R <sub>JA</sub>	240	/W
ESD	HBM	2000	V
	MM	200	V

## / Electrical Characteristics(Ta=25 )

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Input Supply Voltage	V <sub>CC</sub>			5.0		V
Maximum of Input Supply Voltage	V <sub>CC_MAX</sub>				30	V
Input Over-Voltage Protection Voltage	V <sub>OVP</sub>	V <sub>CC</sub> from Low to High		6.8		V

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DATA SHEET

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Input Power Supply OVP Hysteresis Voltage	$V_{OVP\_HYS}$			500		mV
Input Power Supply Current	$I_{CC}$	Charging mode ( $R_{PROG}=10K$ )		300		$\mu A$
		Standby mode, charging terminated		100		$\mu A$
		Shutdown mode ( $R_{PROG}$ not connected, $V_{CC}<V_{BAT}$ or $V_{CC} < V_{UV}$ )		60		$\mu A$



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蓝箭电子  
BLUE ROCKET ELECTRONICS

DATA SHEET

BRCL4058MME-4.2

/

500mA

BRCL4058MME-4.2

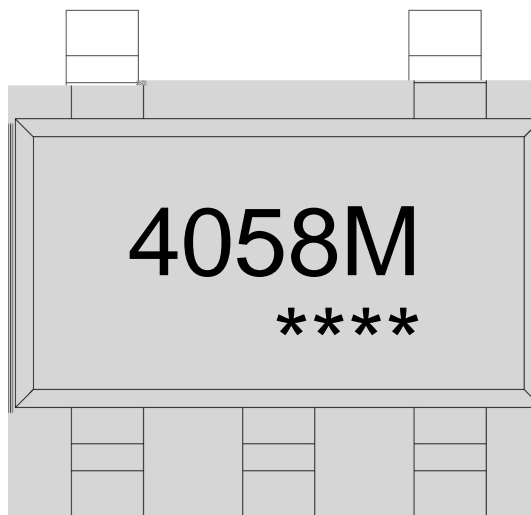


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DATA SHEET

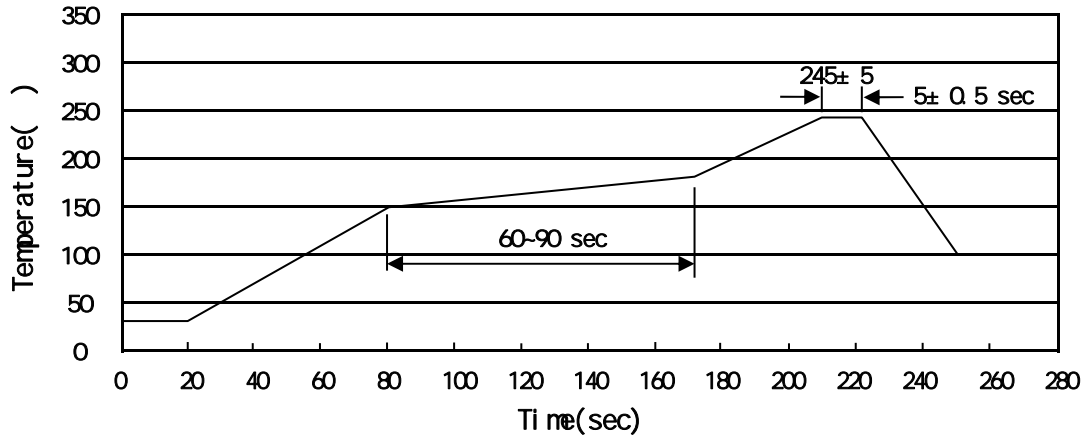
**/ Marking Instructions**



4058M

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( ) / Resistance to Soldering Heat Test Conditions



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	Units					Dimension (unit mm <sup>3</sup> )		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOT23-5/6	3,000	10	30,000	4	120,000	7 x8	210x205x205	445x435x230

/ Notices