/ Descriptions

BRCL4058HME-XX /
BRCL4058HME-XX MOSFET

4.0/4.2/4.35V ISET
1/10 BRCL4058HME-XX
BRCL4058HME-XX 1
μA

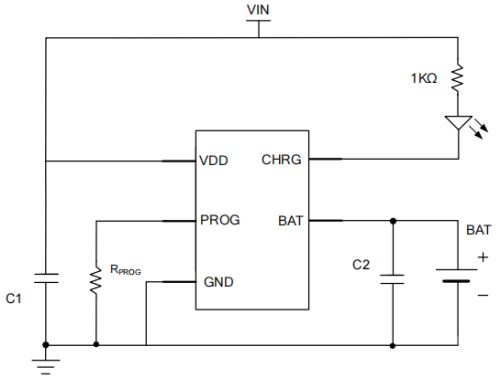
/ Features

- 28V
- 15V
- 6.5V
-
- 800mA
- 1% 4.0/4.2/4.35V
-
- MOSFET
-
- SOT23-5
- RoHS

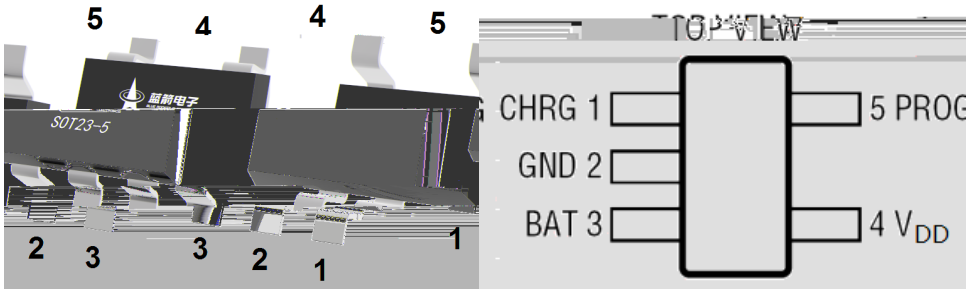
/ Applications

-
-
-
-

/ Application Circuit



/ Pinning



PIN Num.	Symbol	Function
1	CHRG	
2	GND	
3	BAT	
4	V_{DD}	
5	PROG	

/ Part Name

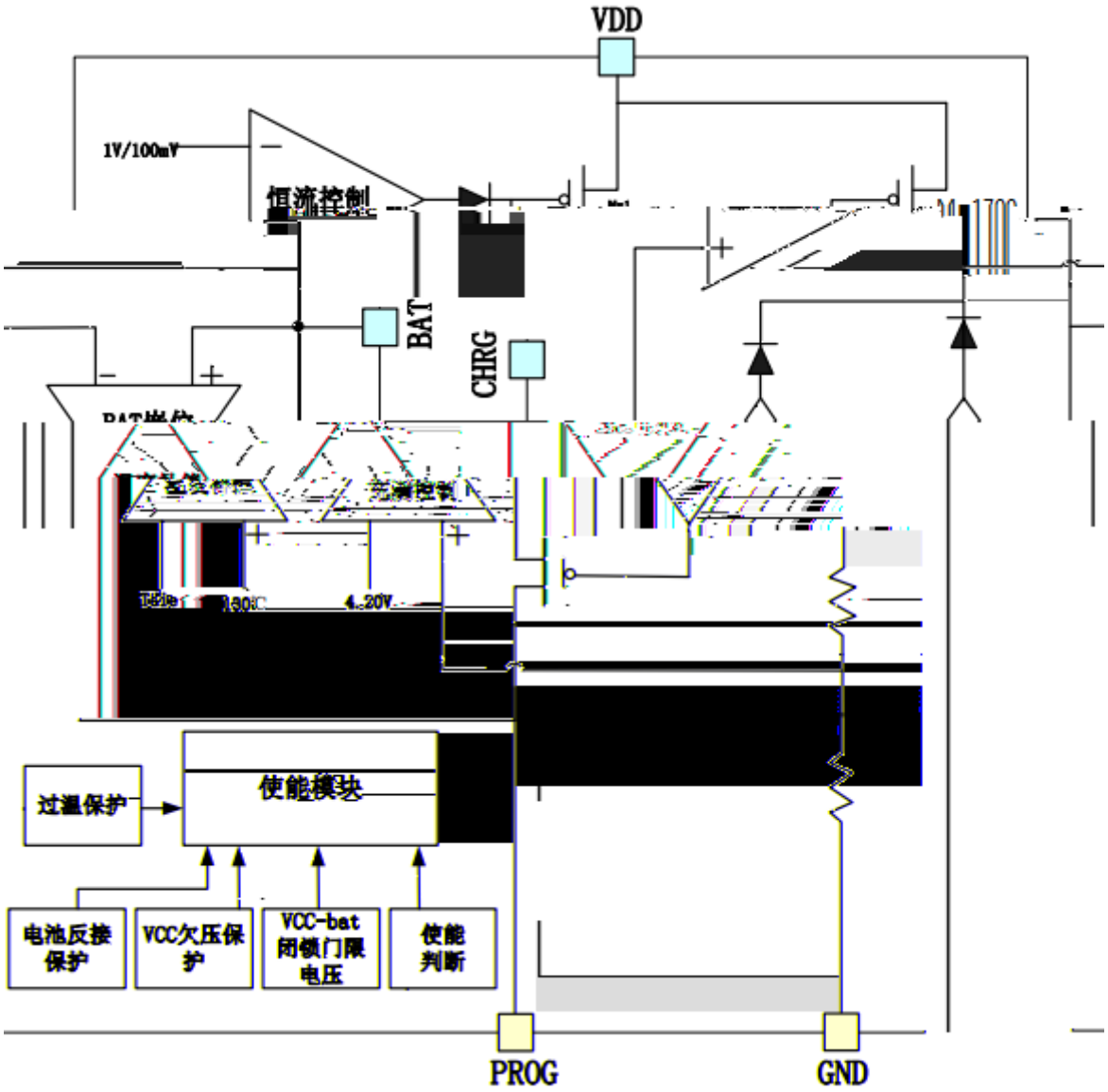
BRCL4058HME-XX	
XX	4.0 4.0V

/ Absolute Maximum Ratings(Ta=25)

PARAMETER	SYMBOL	RATINGS	UNITS
Input Supply Voltage	V_{IN}	-0.3~28	V
BAT Pin Voltage	V_{BAT}	-0.3~15	
Other Pin Voltage	V_{Other}	-0.3~6.5	
Operating Ambient Temperature Range	T_A	-40~+85	°C
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55~+150	°C
Lead Temperature (Soldering, 10s)	T_{solder}	260	°C
ESD	HBM	2000	V
	MM	200	V
Continuous Output Current	I_O	800	mA

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Input Supply Voltage	V_{IN}		4.5	5.0	6.0	V
Input Power Supply Current	I_{IN}	$V_{BAT}= V_{FLOAT}+0.1V$		90		μA
Input Over-Voltage						

/ Principle block diagram



/ Function description

◆

3.3V 6.5V IC BAT 2.6V
BRCL4058HME-XX 1/10 ISET
BAT 2.6V CC
ISET BAT BRCL4058HME-XX
CV CV 1/10

◆

1/10
ISET ISET 100mV t_{TERM}
1ms

◆ **ISET**

ISET
(VISET=1V)

$$IBAT = \frac{1700 \times VISET}{RISET}$$

◆

BRCL4058HME-XX BAT
V_{FLOAT}-150mV 80% 90%

◆ **UVLO**

VIN
UVLO UVLO VIN
110mV

◆

BRCL4058HME-XX

BAT GND 300mV BAT GND
80mV

/ Function description

◆ **CHRG FULL**

BRCL4058HME-XX CHRG

CHRG CHRG

	CHRG
VDD	

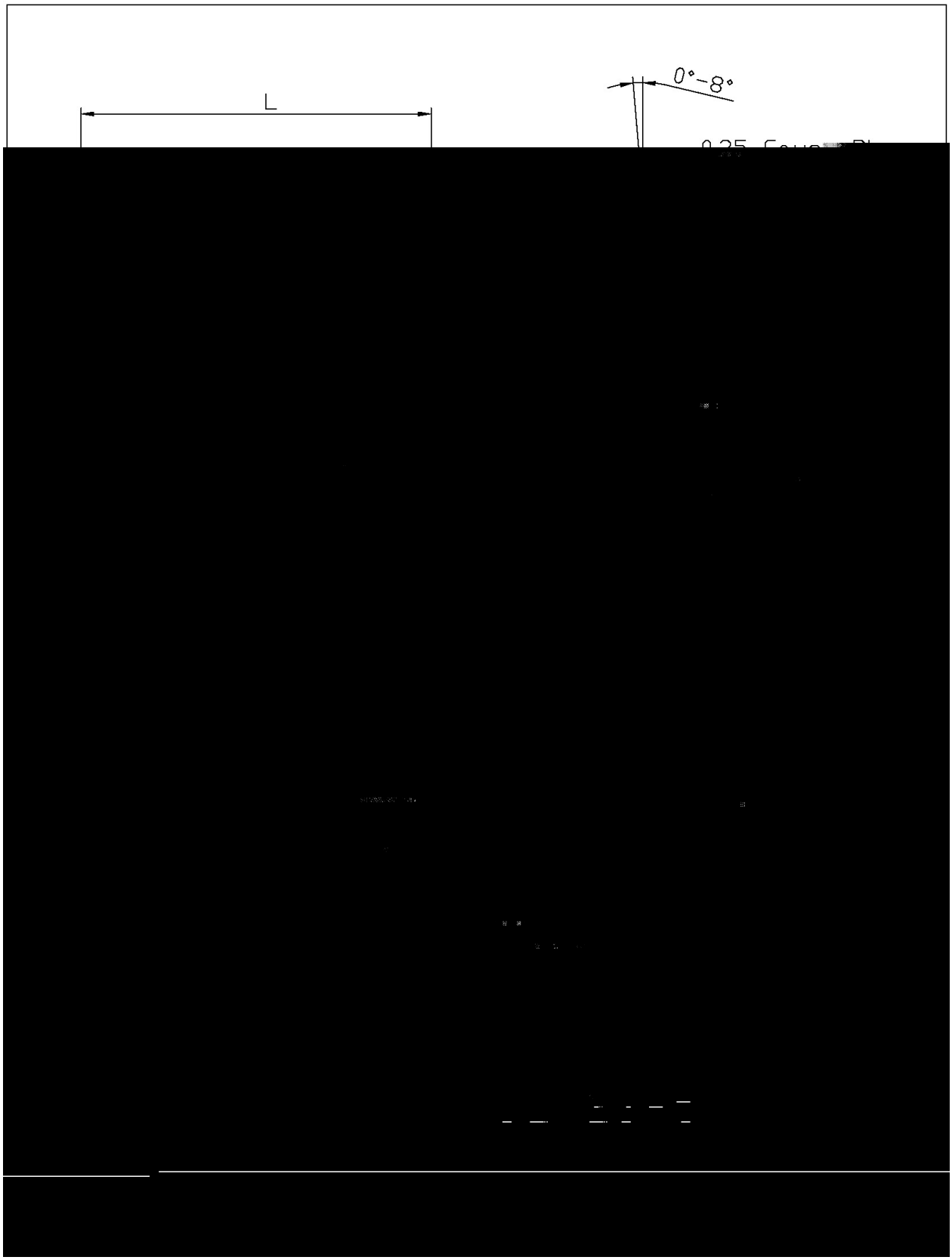
◆

125

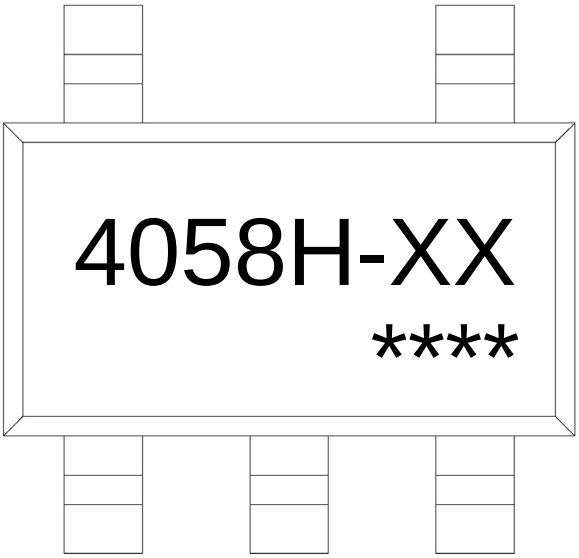
BRCL4058HME-XX

BRCL4058HME-XX

/ Package Dimensions



/ Marking Instructions



4058H

XX

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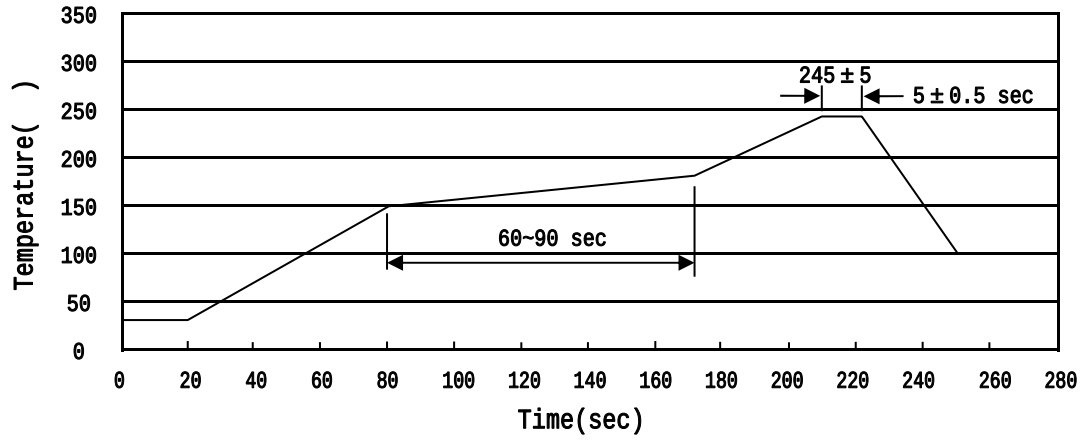
BRCL4058HME-4.0	4058H-40/****
BRCL4058HME-4.2	4058H-42/****
BRCL4058HME-4.35	4058H-435/****

( ) /



			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 mm³)
	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 ×8	210×205×205	445×435×230

/ Notices