

/ Descriptions

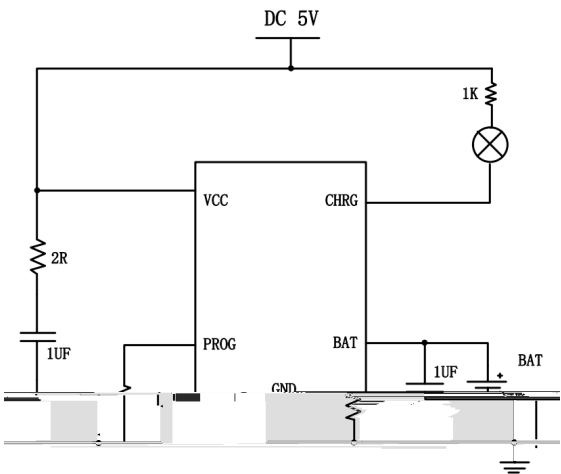
BRCL4058MME-4.2	30V	OVP	500mA
/			
BRCL4058MME-4.2	P-MOSFET		
	4.2V		
BRCL4058MME-4.2			0.1uA
BRCL4058MME-4.2			
BRCL4058MME-4.2	USB		

/ Features

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

/ Applications

/ Application Circuit



/ Electrical Characteristics(Ta=25)

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		μA
		Standby mode, charging terminated		100		μA
		Shutdown mode (R _{PROG} not connected, V _{CC} <V _{BAT} Or V _{CC} V _{UV})		60		μA
Regulated Output (Float) Voltage	V _{FLOAT}		4.158	4.200	4.242	V
BAT Pin Current (The Constant Current Mode Mode Test Condition is V _{BAT} =4.0V)	I _{BAT}	R _{PROG} =10k, Constant Current Mode		98		mA
		R _{PROG} =1.8k, Constant Current Mode		550		mA
		V _{BAT} = V _{FLOAT} , Standby Mode		-2	-6	μA
		Shutdown Mode (R _{PROG} not Connected)		± 1	± 2	μA
		Sleep Mode (V _{CC} =0V)		± 1	± 2	μA
Trickle Charge Current	I _{TRIKL}	V _{BAT} V _{TRIKL} ; R _{PROG} =1.8K		55		mA
Trickle Charge Threshold	V _{TRIKL}	R _{PROG} =10K V _{BAT} from Low to High		2.85		V
Trickle Charge Hysteresis	V _{TR_HYS}	R _{PROG} =1.8K		350		mV
V _{CC} undervoltage lockout threshold	V _{UV}	V _{CC} from Low to High		3.8		V
V _{CC} undervoltage lockout hysteresis	V _{UVHYS}			280		mV
V _{CC} -V _{BAT} lockout threshold voltage	V _{ASD}	V _{CC} from Low to High V _{CC} from High to Low		200 100		mV
C/10 Charging Termination Current	I _{TERM}	R _{PROG} =10K R _{PROG} =1.8K		10 55		mA
R _{PROG} voltage at Constant Current Mode	V _{PROG}	R _{PROG} =1.8K, Constant Current Mode	0.9	1.0	1.1	V
CHRG pin outputs low voltage	V _{CHRG}	I _{CHRG} =5mA		0.6		V
Rechargeable Battery Voltage	V _{RECHRG}	V _{FLOAT} -V _{RECHARH}		100		mV
Junction Temperature in Limited Temperature Mode	T _{LIM}			140		
Static Drain-Source On-Resistance	R _{DS(on)}			1100		mΩ
Soft start time	T _{SS}			20		μS

/ Function description

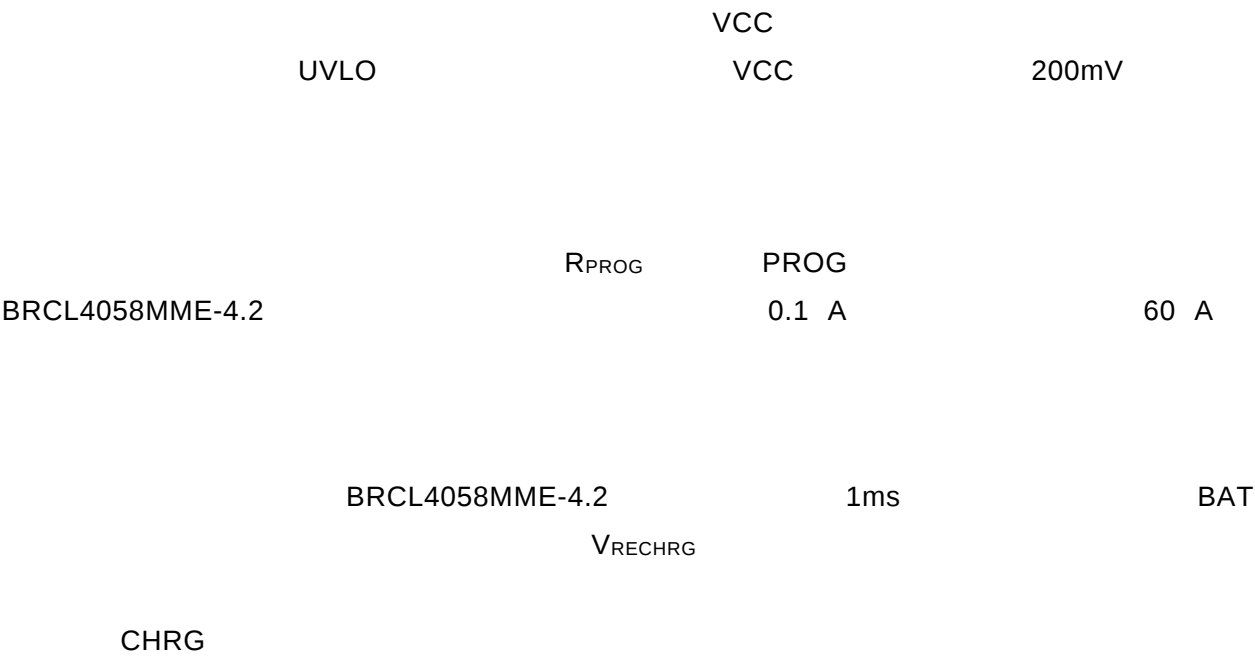
BRCL4058MME-4.2 /
500mA BRCL4058MME-4.2 USB

OVP
BRCL4058MME-4.2 OVP VCC 6.8V OVP
6.8V 6.3V
 $I_{CH} = 1000/R_{PROG}$ I_{CH} R_{PROG}
 R_{PROG} 200mA
 $R_{PROG} = 1000/0.2 = 5K$
 R_{PROG} 1%

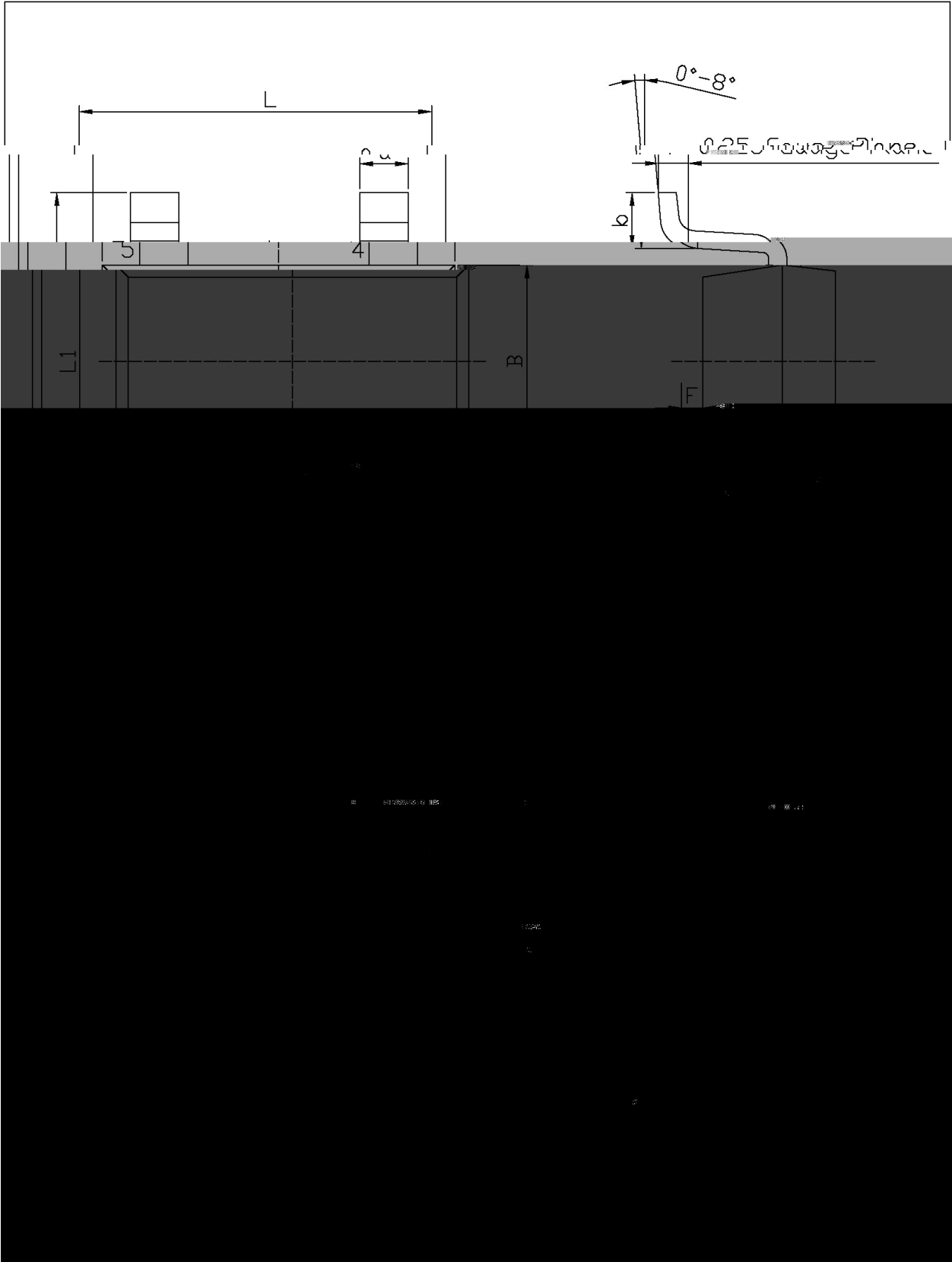
$R_{PROG}(K\Omega)$	$I_{CH}(mA)$
10	100
5	200
3.3	300
2	500

1/10
PROG 100mV
 T_{TERM} 2.5ms C/10
BAT PROG DC 1/10
100mV 1/10 BRCL4058MME-4.2
BAT
BRCL4058MME-4.2 BAT

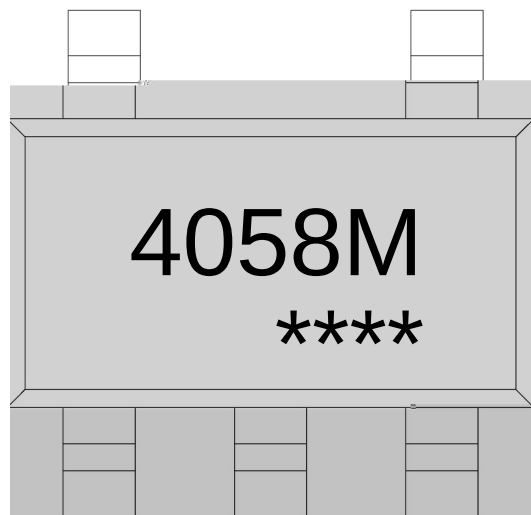
/ Function description



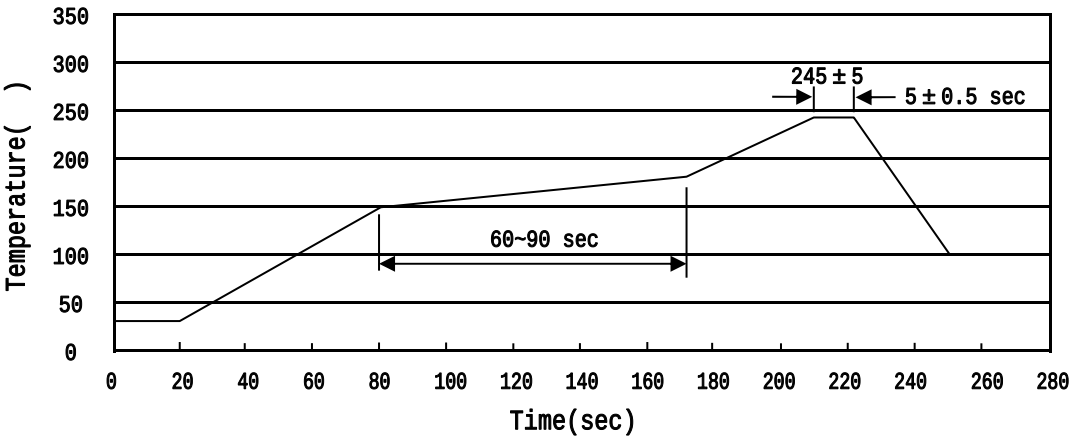
/ Package Dimensions



/ Marking Instructions



() /



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 ³)		
SOT23-5/6	3,000	10	30,000	4	120,000	7 ×8	210×205×205	445×435×230

/ Notices