

BRCL4058HMF-XX

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BRCL4058HMF-XX

MOSFET

4.0/4.2/4.35V

ISET

1/10

BRCL4058HMF-XX

BRCL4058HMF-XX

1

 μA

28V

15V

6.5V

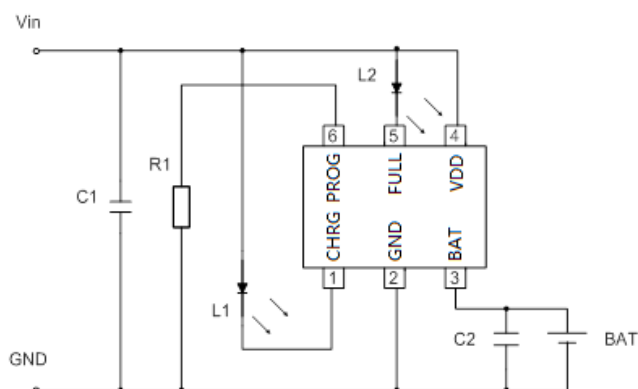
800mA

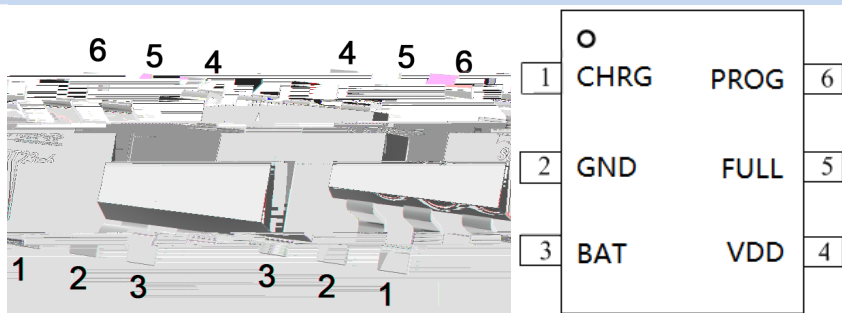
1% 4.0/4.2/4.35V

MOSFET

SOT23-6

RoHS



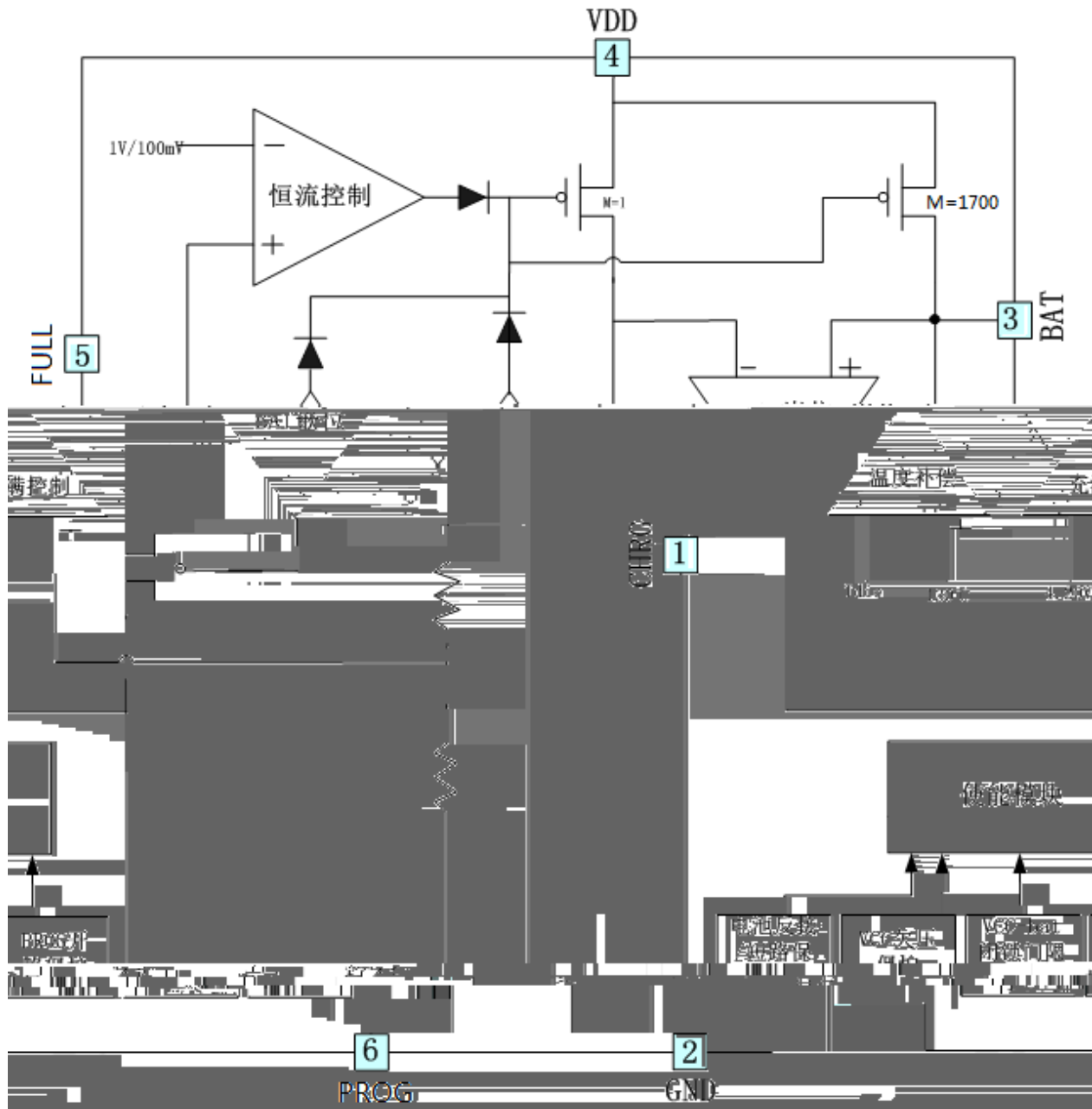


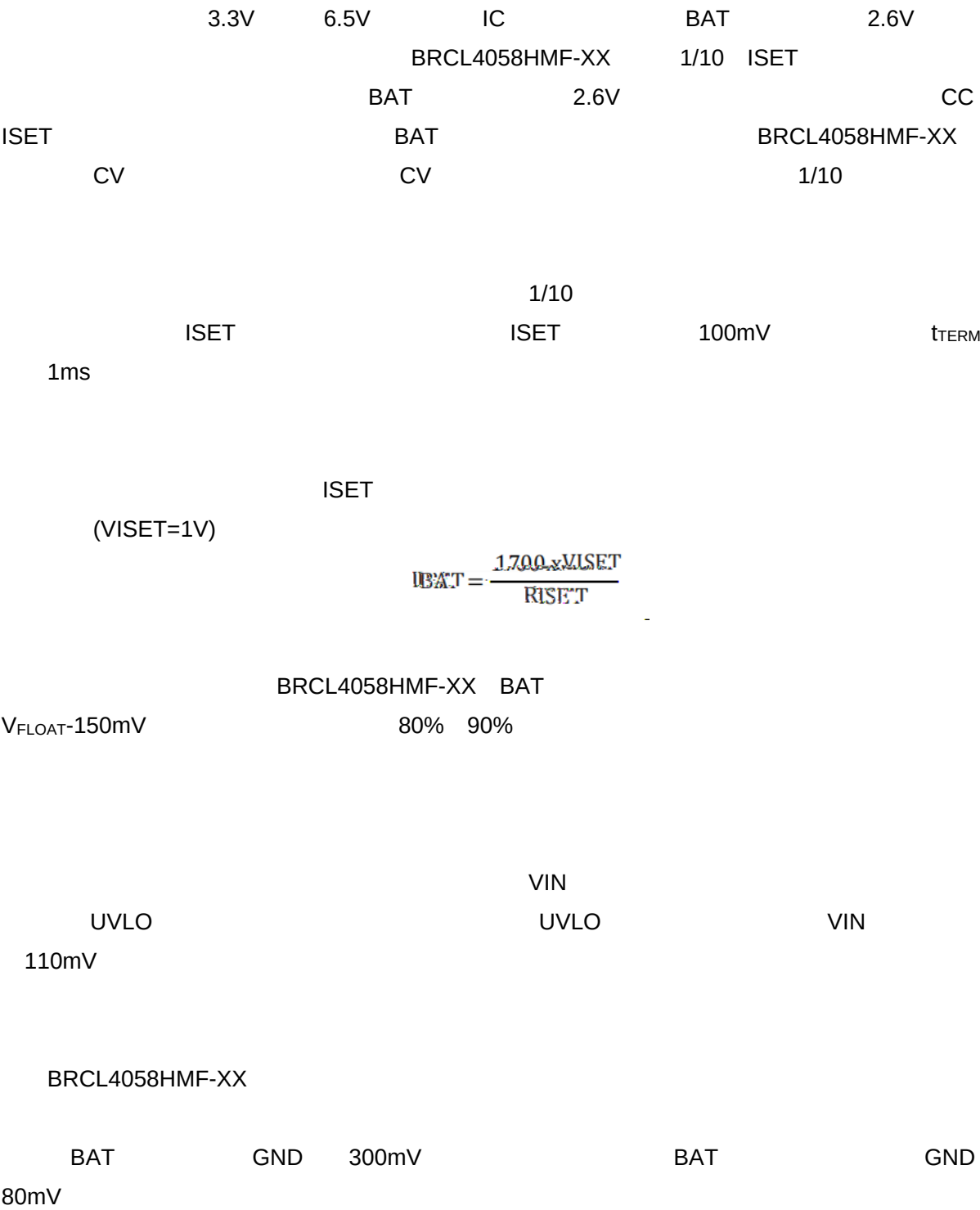
1	CHRG	
2	GND	
3	BAT	
4	V _{DD}	
5	FULL	
6	PROG	

BRCL4058HMF-XX		
XX	4.0	4.0V

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

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 Protection Voltage	V_{ovp}	V_{IN} from Low to High		6.5		V
Input Over-Voltage Protection Voltage Hysteresis	ϕV_{OVP}			300		mV
V_{IN} Under Voltage Lockout Threshold	V_{UVL}	V_{IN} from High to Low $V_{BAT} = 2.7V$		3.3		V
V_{IN} Under voltage Lockout Hysteresis	ϕV_{UVL}			100		mV
Regulated Output (Float) Voltage	V_{FLOAT}	$I_{BAT} = 40mA$	3.96	4.0	4.04	V
			4.158	4.2	4.242	
			4.307	4.35	4.394	
Recharge Battery Threshold	ϕV_{RECHRG}	$V_{FLOAT} - V_{RECHRG}$		150		mV
BAT Pin Current	I_{BAT}	$R_{ISET} = 17k$, Constant Current Mode		100		mA
		$R_{ISET} = 3.4k$, Constant Current Mode		500		mA
		$R_{ISET} = 2.1k$, Constant Current Mode		800		mA
		$V_{BAT} = V_{FLOAT}$, Standby Mode		2.5		μA
		Shutdown Mode ($V_{BAT} = V_{FLOAT}$, RPROG not Connected / $V_{IN} = 0$)		0.1		μA
		Battery Reverse Connection ($V_{BAT} = -V_{FLOAT}$, $V_{IN} = 0$)		2		mA
Trickle Charge Threshold	V_{TRIKL}	V_{BAT} from Low to High		2.6		V
Trickle Charge Hysteresis	ϕV_{TRIKL}			200		mV
Trickle Charge Current	I_{TRIKL}			10		$\%I_{BAT}$
Termination Current Threshold	I_{EOC}			10		$\%I_{BAT}$
CHRG/FULL Pin Pull-Down Current	I_{CHRG}	$V_{CHRG} = 5V$			5	μA
CHRG/FULL Pin Output Low Voltage	V_{CHRG}	$I_{CHRG} = 5mA$			0.1	V
ISSET Pin Voltage	V_{ISET}	$R_{ISET} = 10k$, Constant Current Mode $V_{BAT} = 3.6V$ $V_{IN}: 3.5V \rightarrow 4V$		1		V
VIN-VBAT Locking Threshold Voltage	V_{ASD}					





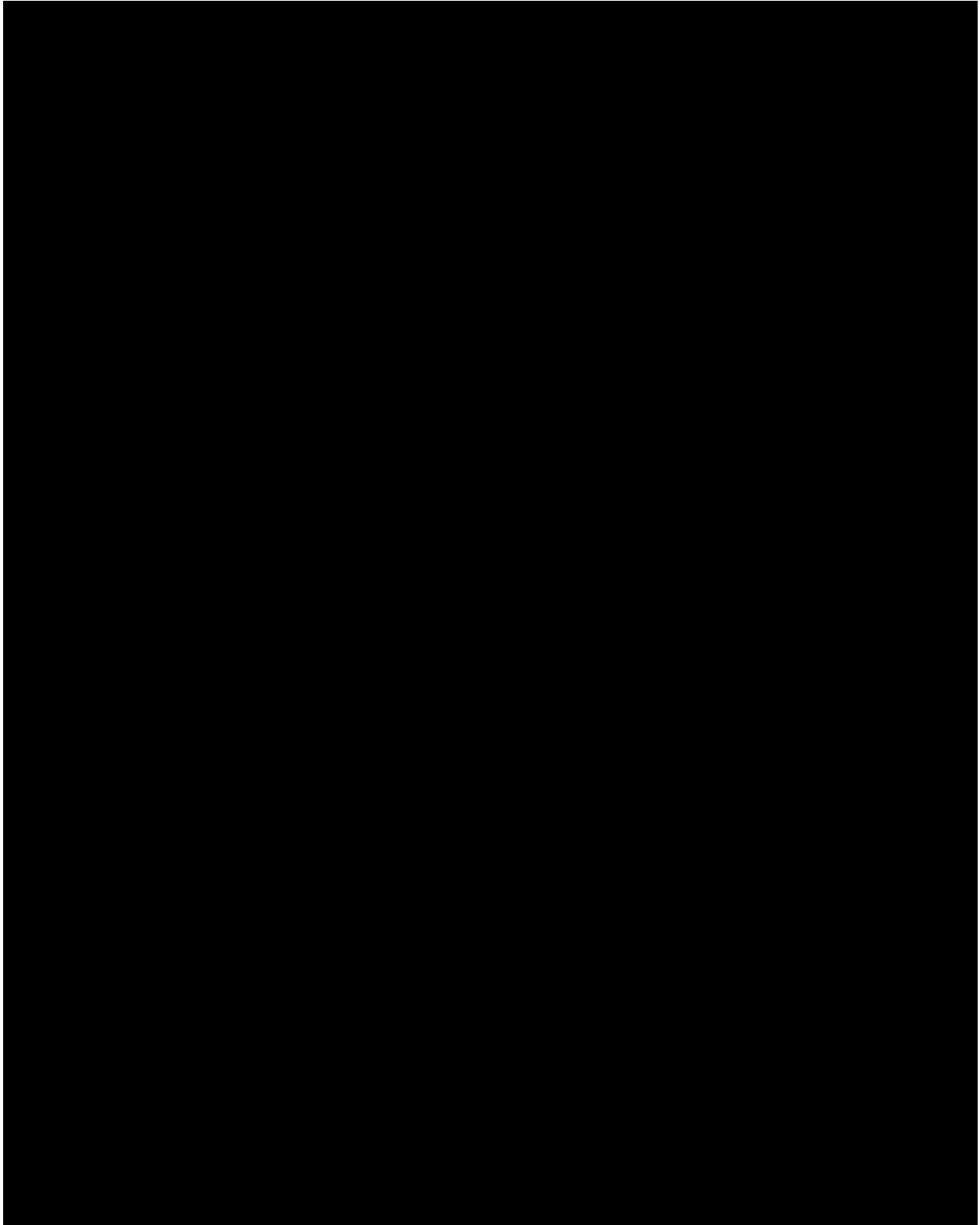
BRCL4058HMF-XX
CHRG FULL

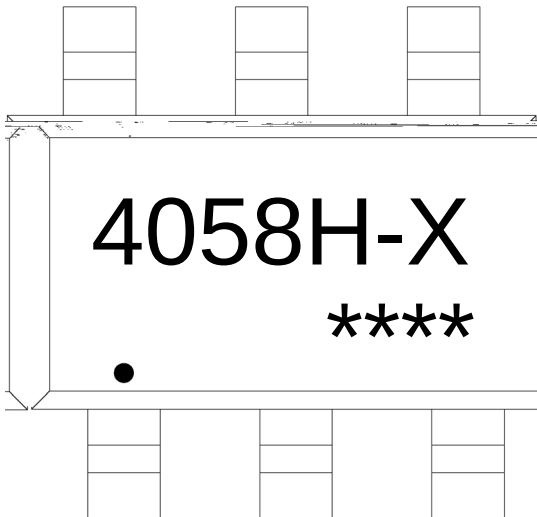
CHRG FULL
CHRG FULL
GND

	CHRG
VDD	

125

BRCL4058HMF-XX
BRCL4058HMF-XX





4058H

XX

BRCL4058HMF-4.0	4058H-40/****
BRCL4058HMF-4.2	4058H-42/****
BRCL4058HMF-4.35	4058H-435/****

Temperature Profile for IR Reflow Soldering(Pb-Free)

Note:

1. Preheating: 150~180℃, Time: 60~90sec;
 2. Peak T: 245±5℃, Time: 5±0.5sec;
 3. Cooling rate: ≤3℃/s