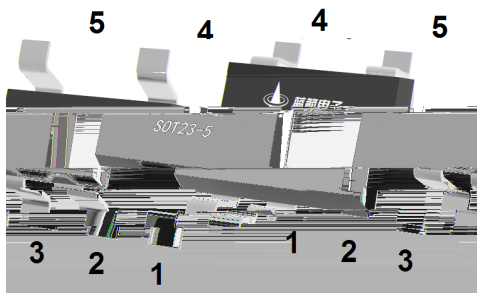


/ Pinning



TOP VIEW



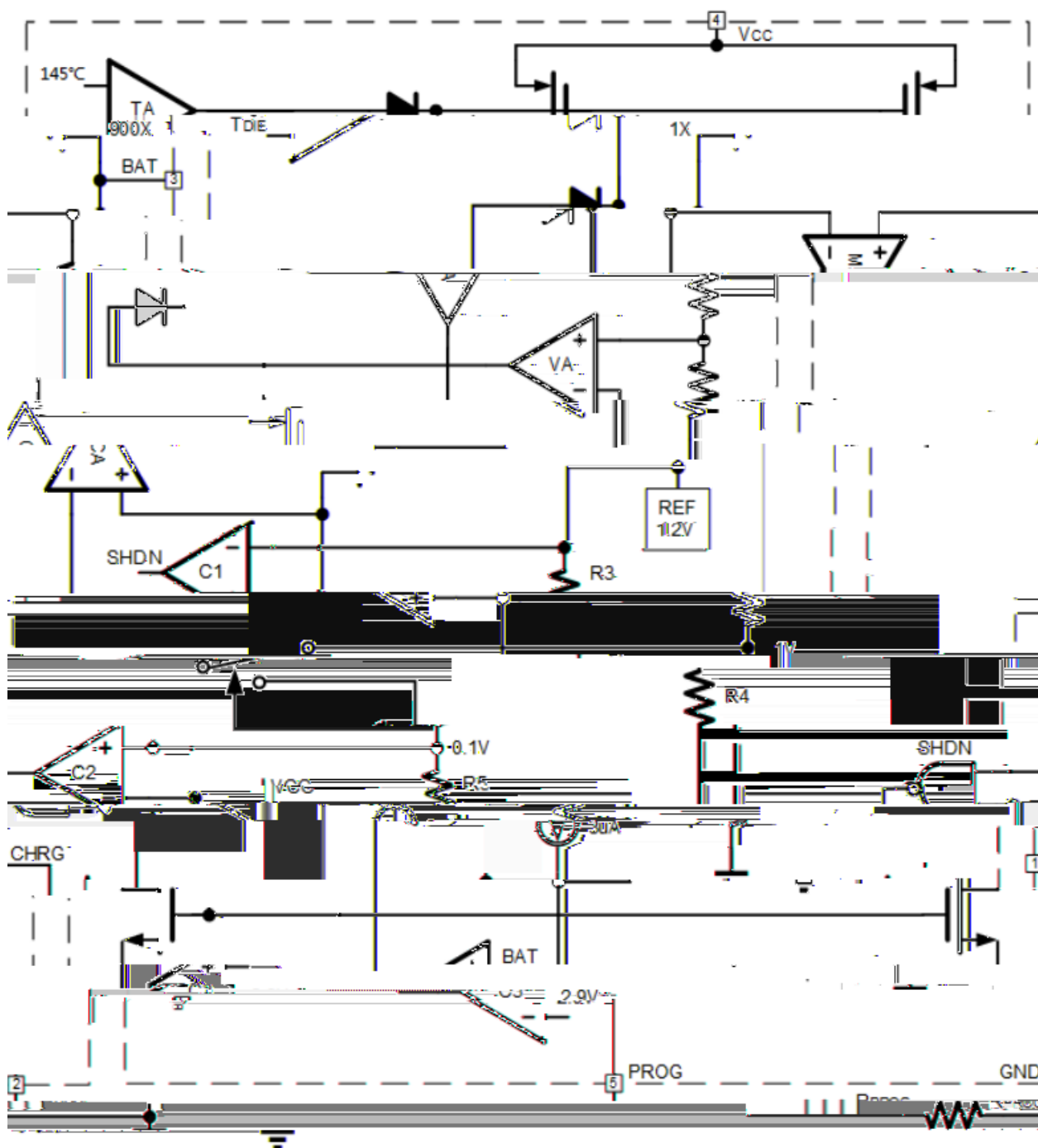
PIN Num.	Symbol	Function
1	CHRG	
2	GND	
3	BAT	
4	VCC	
5	PROG	

/ Absolute Maximum Ratings(Ta=25)

PARAMETER	SYMBOL	RATINGS	UNITS
Input Pin Voltage	V _{VCC}	-0.3~36	V
BAT Pin Voltage	V _{BAT}	-4.2~18	
Other Pin Voltage	V _{PROG}	-0.3~5.5	
CHRG Pin Voltage	V _{CHRG}	-0.3~13	
Storage Temperature	T _{stg}	-65~+150	
Junction Temperature	T _J	150	
Operating Ambient Temperature Range	T _{OP}	-40~+85	
Lead Temperature (Soldering, 10s)	T _{solder}	260	
Power onsumption	P _D	0.3	W
Junction-to-Ambient	R _{θJA}	250	/W
ESD	HBM	2000	V
	CDM	1000	V

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Input Voltage Range	V _{CC}		4.5	5	36	V
Quiescent Supply Current	I _Q	Charge Mode R _{PROG} =2.05k		240	360	μA
		Standby Mode (Charge Terminated)		220	300	μA
		Shutdown Mode (R _{PROG} Not Connected, V _{CC} < V _{BAT} , or V _{CC} < V _{UV})		220	300	μA
		OVP state		120	250	μA
Regulated Output (Float)Voltage	V _{FLOAT}	0 ≤ T _A ≤ 85 °C, R _{PROG} = 2.05k	4.158	4.200	4.242	V
BAT Pin Current	I _{BAT}	R _{PROG} = 2.05k, Current Mode	400	450	500	mA
		Standby Mode, V _{BAT} = 4.2V	0	-2.5	-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} = 2.05K	30	45	60	mA
Trickle Charge Threshold Voltage	V _{TRIKL}	R _{PROG} = 2.05k, V _{BAT} Rising	2.3	2.5	2.7	V
Trickle Charge Hysteresis Voltage	V _{TRHYS}	R _{PROG} = 2.05k	120	160	200	mV
V _{CC} Undervoltage Lockout Threshold	V _{UV}	From V _{CC} Low to High	3.5	3.7	3.9	V
V _{CC} Undervoltage Lockout Hysteresis	V _{UVHYS}	From V _{CC} High to Low	100	200	300	mV
V _{CC} -V _{BAT} Lockout Threshold Voltage	V _{ASD}	V _{CC} from Low to High	100	125	150	mV
		V _{CC} from High to Low	30	65	100	mV
C/10 Termination Current Threshold	I _{TERM}	R _{PROG} = 2.05k	40	45	50	mA
PROG Pin Voltage	V _{PROG}	R _{PROG} = 2.05k, Current Mode	0.9	1.0	1.1	V
CHRG Pin Output Low Voltage	V _{CHRG}	I _{CHRG} = 5mA		0.3	0.6	V
Recharge Battery Threshold Voltage						

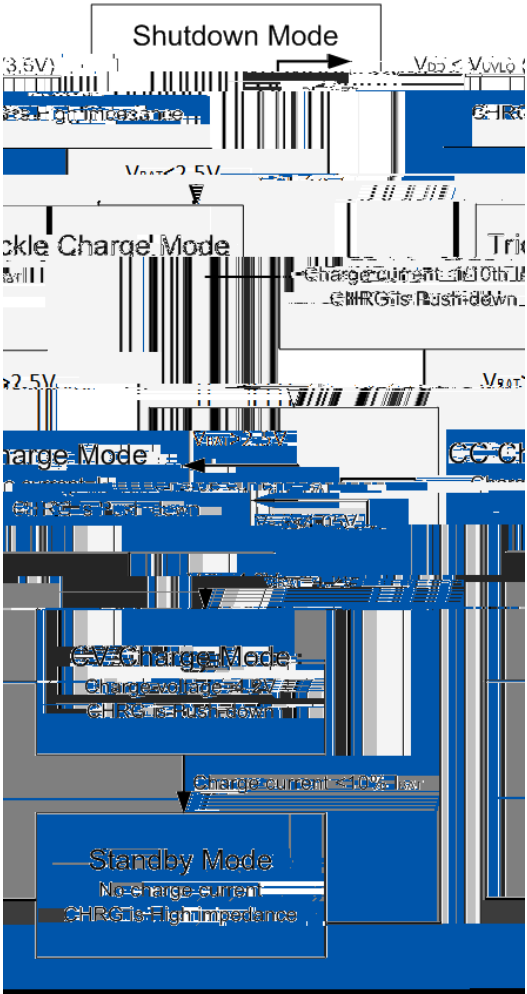
/ Principle block diagram



BRCL4058PME-4.2	/			PCB
600mA		±1%	BRCL4058PME-4.2	P
MOSFET				
BRCL4058PME-4.2	USB			
VCC	UVLO	1%	PROG	
	BAT	2.5V		
BRCL4058PME-4.2	1/10			
BAT	2.5V			BAT

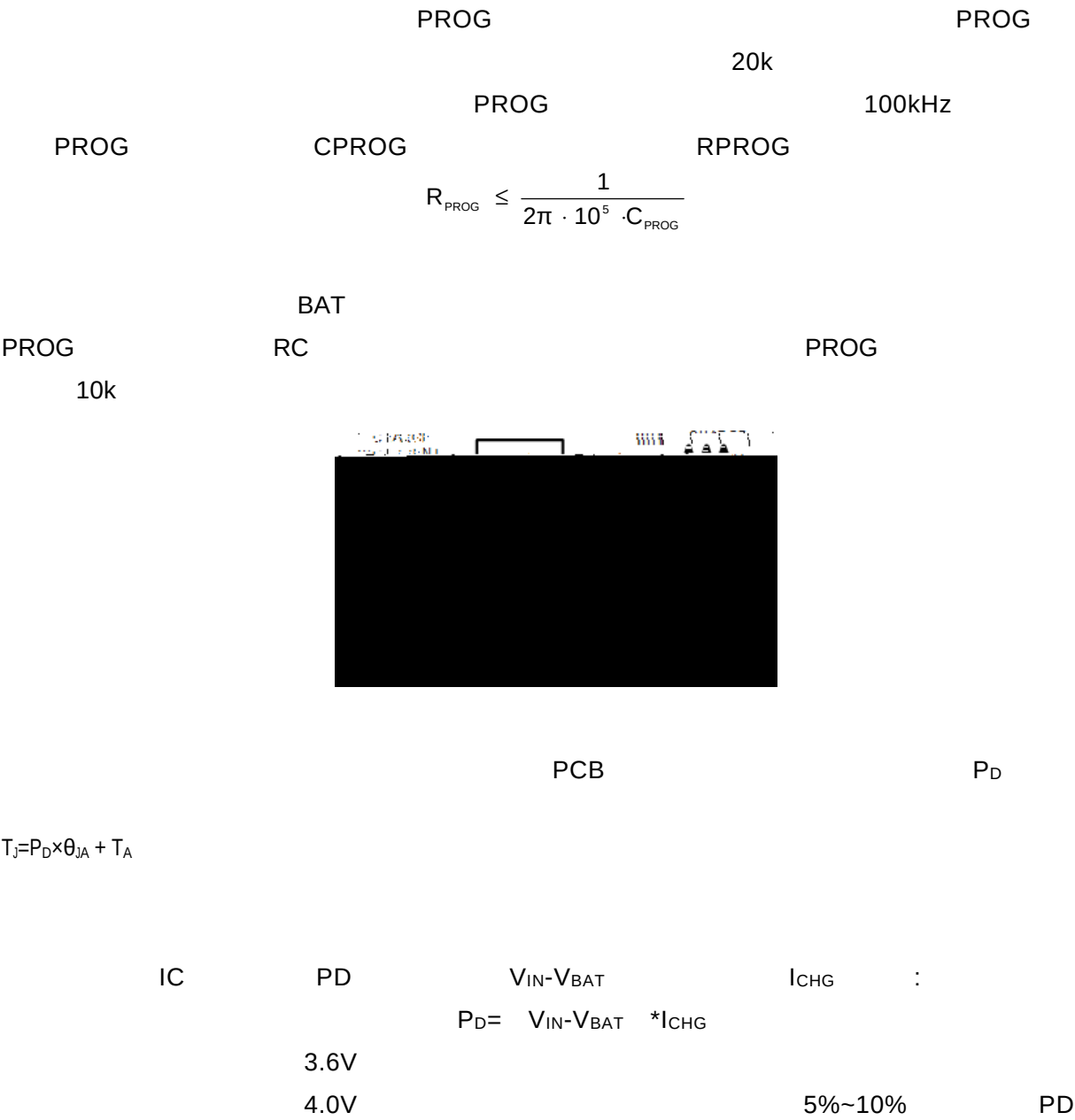
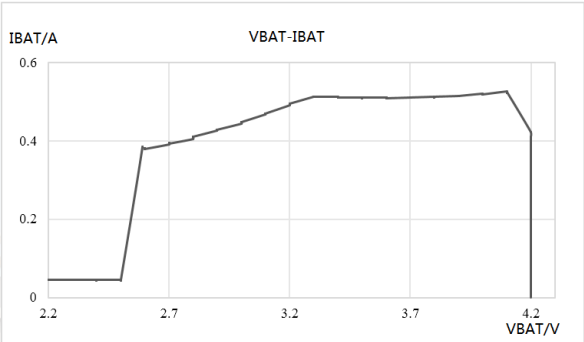
/ Function description

			1/10	
PROG	PROG	100mV	tTERM	
BRCL4058PME-4.2			55μA	
C/10				
BAT	PROG			1/10
100mV	1.8ms	tTERM		
	1/10	BRCL4058PME-4.2		
BAT	BAT			
BRCL4058PME-4.2	BAT		4.05V	
VRECHRG				
	PROG			



BRCL4058PME-4.2		CHRG	BRCL4058PME-4.2		
CHRG	CHRG Đ		CHRG	℃ ¯ ¯ H	GE

/ Function description



/ Package Dimensions



23-2

/ Marking Instructions

