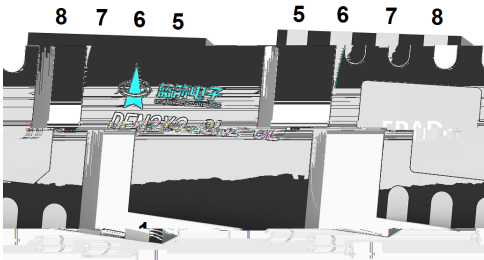
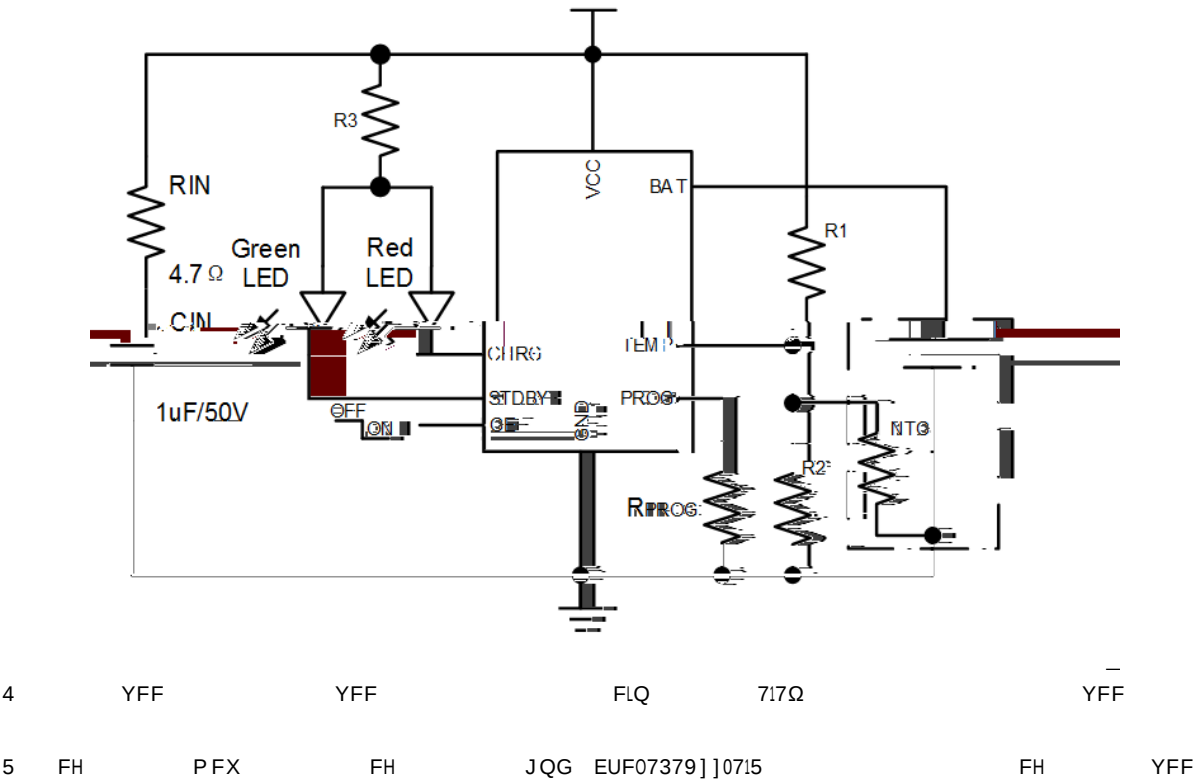


BRCL4079ZZ-4.2		
BRCL4079ZZ-4.2	/	
BRCL4079ZZ-4.2		USB
BRCL4079ZZ-4.2	PMOSFET	

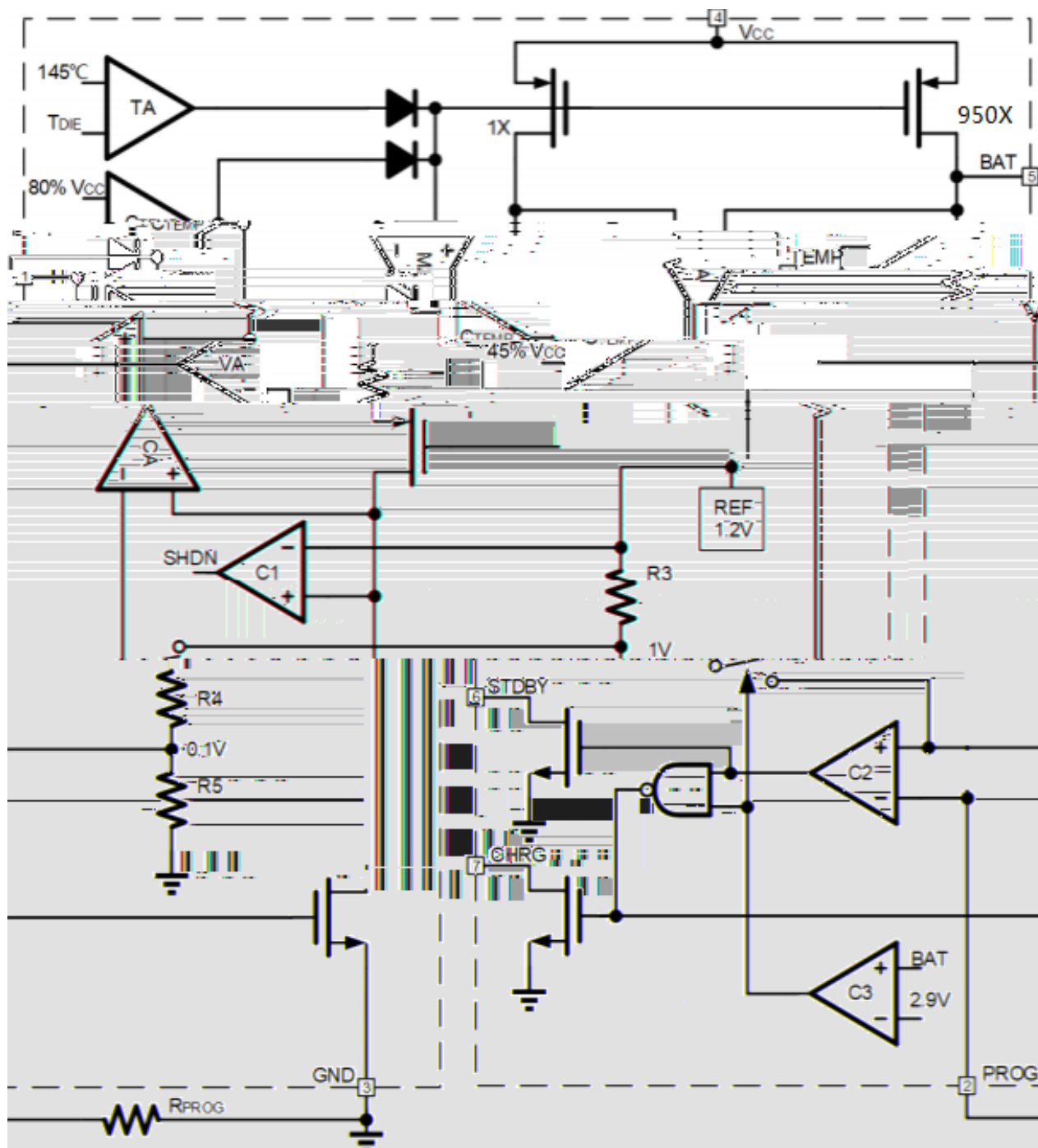


PIN Num.	Symbol	Function
1	TEMP	
2	SUR J	JQG
3	GND	
4	VCC	
5	BAT	
6	STDBY	
7	CHRG	
8	CE	
HSDG	JQG	

/ Electrical Characteristics($V_{CC}=5V, V_{BAT}=3.6V, T_a=25^{\circ}C$)

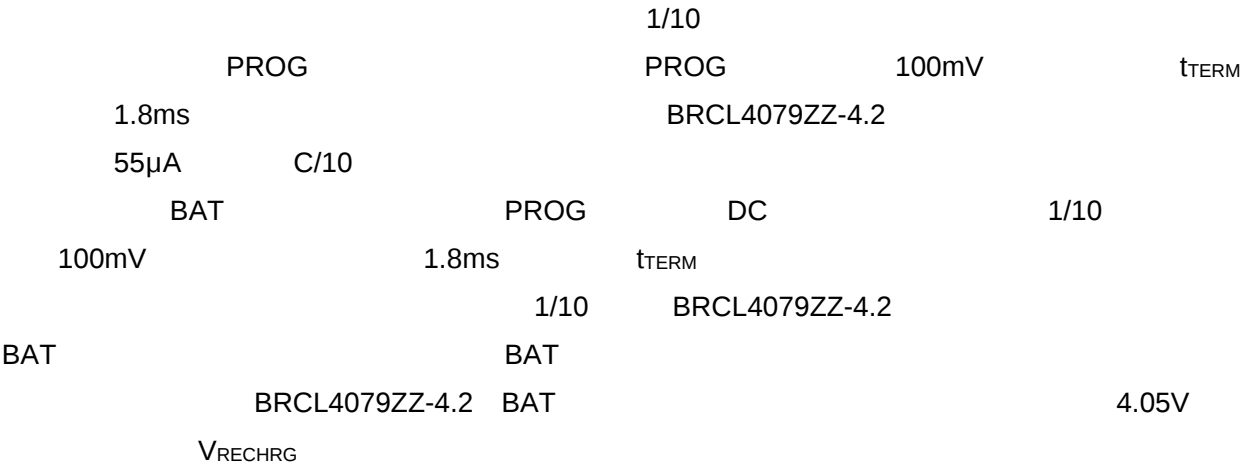
PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
V_{CC} Under voltage Lockout Hysteresis	$V_{CC_UV_HYS}$	V_{CC} from High to Low	100	200	300	mV
$V_{CC}-V_{BAT}$ Lockout Threshold	V_{ASD}	V_{CC} from Low to High	100	125	150	mV
		V_{CC} from High to Low	30	65	100	mV
C/10 Charging Termination Current	I_{TERM}	$R_{PROG}=1.0k$	62	95	128	mA
R_{PROG} voltage at Constant Current Mode	V_{PROG}	$R_{PROG}=1.0k$, Current mode	0.9	1.0	1.1	V
CHRG outputs low voltage	V_{CHRG}	$I_{CHRG}=5mA$		0.3	0.6	V
STDBY outputs low voltage	V_{STDBY}	$I_{STDBYG}=5mA$		0.3	0.6	V
Rechargeable Battery Voltage	ΔV_{RECHRG}	$V_{FLOAT}-V_{RECHARGH}$	100	150	200	mV
Junction temperature in limited temperature mode	T_{LIM}			145		$^{\circ}C$
Static Drain-Source On-Resistance	$R_{DS(on)}$			500		$m\Omega$
Soft start time	t_{ss}	$I_{BAT} = 0$ to $I_{BAT} = 950V/R_{PROG}$		20		μs
Recharge Comparator Filtering Time	$t_{RECHARG}$	V_{BAT} from High to Low	0.8	1.8	4.0	ms
Terminate comparator filtering Time	t_{TERM}	I_{BAT} drop to $I_{CHG}/10$	0.8	1.8	4.0	ms
PROG pin pull-up current	I_{PROG}			1.0		μA
TEMP high-side protection voltage	V_{TEMP-H}			80	82	$\%V_{CC}$
TEMP low-side protection voltage	V_{TEMP-L}		43	45		$\%V_{CC}$

/ Principle block diagram



/ Function description

BRCL4079ZZ-4.2					/		
	1.0A		PCB	² 1%			
BRCL4079ZZ-4.2	P	MOSFET					
			BRCL4079ZZ-4.2	USB			
VCC	UVLO	PROG			1%		
			BAT	V _{TRIKL}			
		BRCL4079ZZ-4.2	1/10				
BAT	V _{TRIKL}			BAT			
	V _{FOLOAT}	BRCL4079ZZ-4.2					
	1/10						
		PROG		PROG			
950							
		R _{PROG} =950/I _{CHG}	I _{CHG} =950/R _{PROG}				
BAT		PROG					
		I _{BAT} =(V _{PROG} ×950)/R _{PROG}					
0.5A							
				R _{PROG}			



/ Function description

BRCL4079ZZ-4.2			CHRG STDBY BRCL4079ZZ-4.2		
CHRG		CHRG		STDBY	
CHRG STDBY					
TEMP		BAT		10μF	
LED	LED	1-4s			
			OHG FKUJ		OHG VWGE\
EDW 43uI +WHPS= JQG,			OHG OHG 407s		

145

BRCL4079ZZ-4.2BRCL4079ZZ-4.2

BRCL4079ZZ-4.2

TEMPTEMPNTC

BRCL4079ZZ-4.2TEMPVLOW VHIGH

BRCL4079ZZ-4.2VLOW45%×Vcc VHIGH

80%×Vcc

TEMPVTEMP<VLOW VTEMP>VHIGH

TEMPVTEMP VLOW VHIGHTEMP



/ Function description

R1 R2

R1 R2

TL~TH TL TH)

NTC RTL TL RTH TH RTL RTH
TL TEMP

$$V_{TEMPL} = \frac{R2 || RTL}{R1 + R2 || RTL} V_{IN}$$

TH TEMP

$$V_{TEMPH} = \frac{R2 || RTH}{R1 + R2 || RTH} V_{IN}$$

$$V_{TEMPL} = V_{HIGH} = k2 \times V_{CC} (k2 = 0.9) \\ = 0.45) V_{TEMPH} = V_{LOW} = k1 \times V_{CC} (k1$$

$$R1 = \frac{RTL \times RTH(k2 - k1)}{(RTL - RTH)k2 \times k1}$$

$$R2 = \frac{RTL \times RTH(k2 - k1)}{RTH(k1 - k2 \times k1) - RTL(k2 - k2 \times k1)}$$

PTC

$$R1 = \frac{RTL \times RTH(k2 - k1)}{(RTH - RTL)k2 \times k1}$$

$$R2 = \frac{RTL \times RTH(k2 - k1)}{RTH(k1 - k2 \times k1) - RTL(k2 - k2 \times k1)}$$

Vcc

R1 R2 RTH RTL

RTH RTL

R2

R1

R1

UVLO

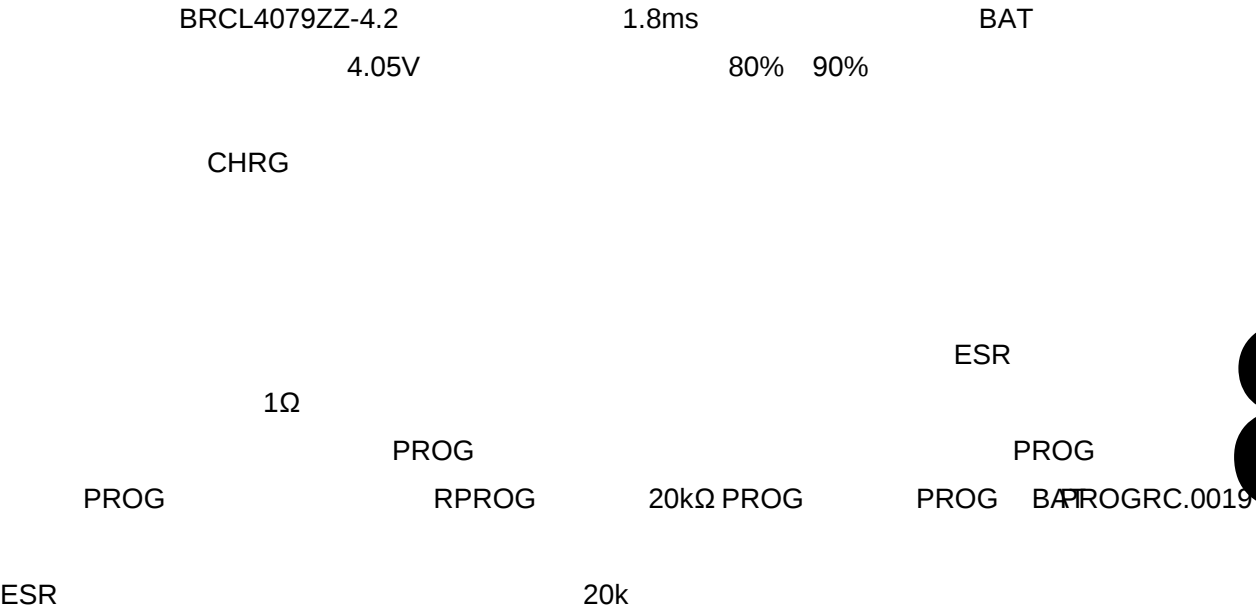
VCC

UVLO

UVLO

VCC

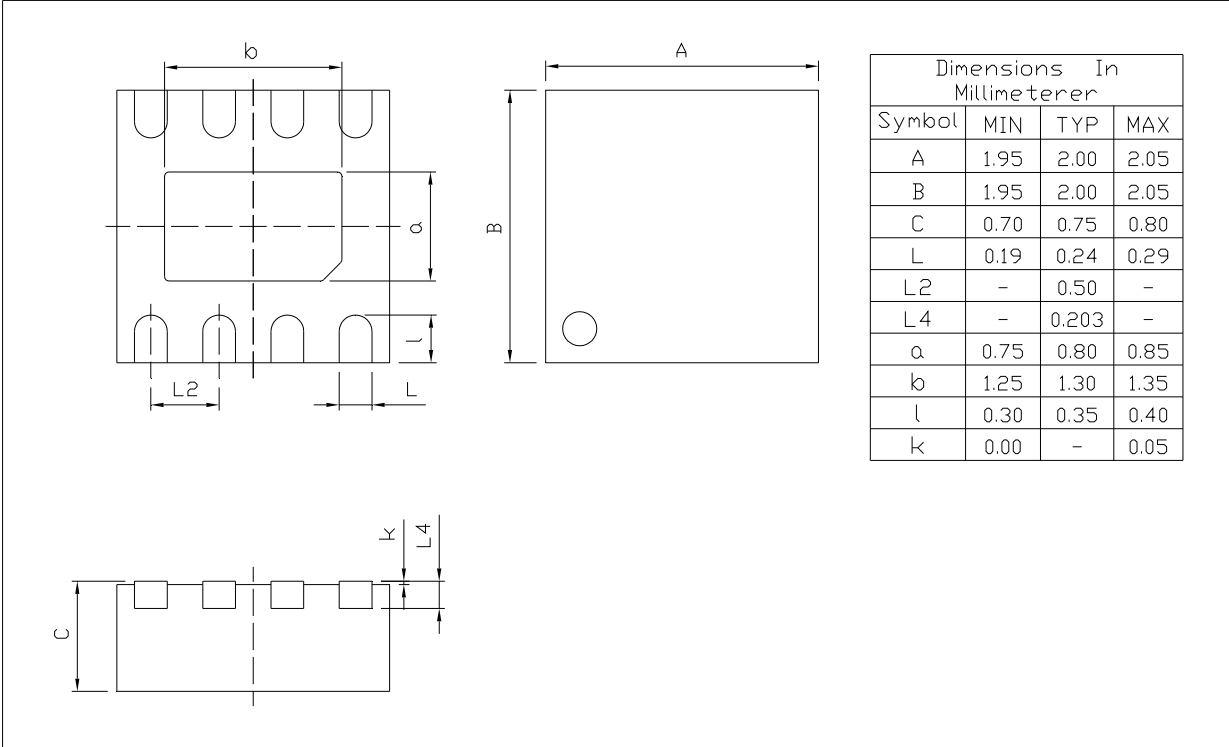
100mV



/ Package Dimensions

DFN2×2-8L-0.75

Unit:mm



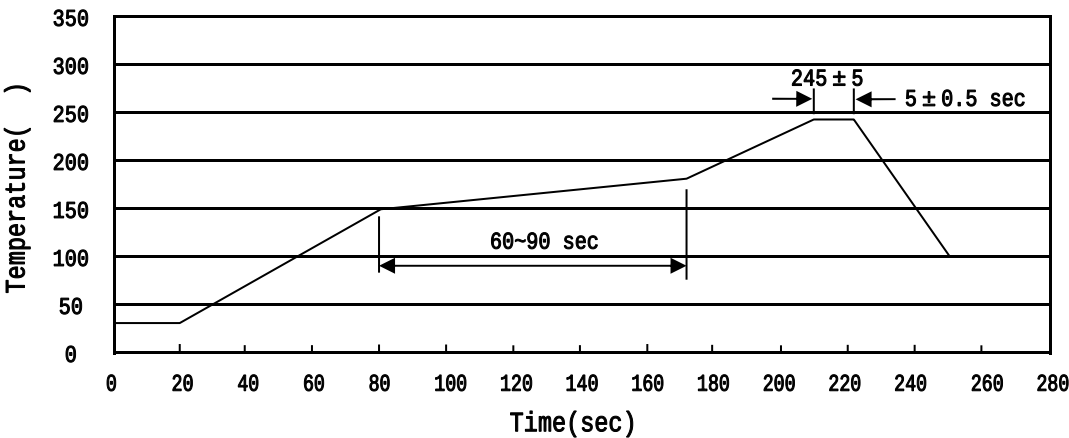
Rev.00 202012

/ Marking Instructions



7379	
75	715Y

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



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)		
DFN2×2-8L	4,000	10	40,000	4	160,000	7 ×8	210×205×205	445×435×230

/ Notices

All information provided in this document is subject to legal disclaimers.