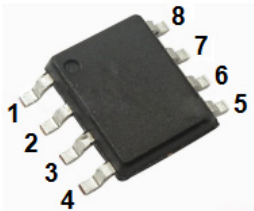
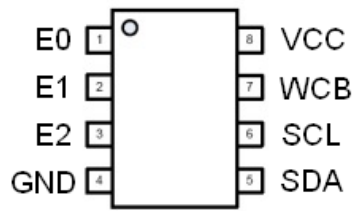


/ Descriptions			
BRCM24C02SC	SOP-8	2 Kbit	I²C

/ Features			
1.7V	2.5~5.5V	1Mhz	1.7~2.5V
400Khz			
CMOS	400uA	1.6mA	
8			
128			
5ms			
100	100	ESD HBM	6KV
+/-200mA;			

/ Applications

/ Pinning



/ Pinning

Pin	Name	Type	Description
1	E0	Input	
2	E1	Input	
3	E2	Input	
4	GND	Ground	
5	SDA	I/O	/
6	SCL	Input	
7	WCB	Input	
8	VCC	Power	

/ Marking

/ Absolute Maximum Ratings(Ta=25)

			mA
			V

/ Reliability Characteristic

/ DC Electrical Characteristics(Unless otherwise specified, Vcc = 1.7V to 5.5V,
T_A = 40 C to 85 C)

		o				
		o				

/ AC Electrical Characteristics(Unless otherwise specified, Vcc = 1.7V to 5.5V,
T_A = 40 C to 85)

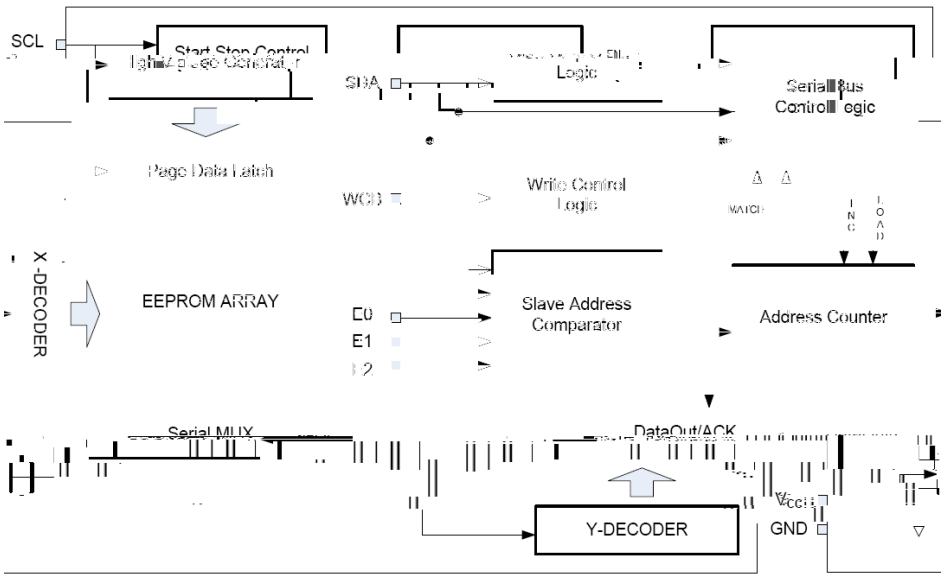
		≤			≤ ≤			

/ AC Electrical Characteristics(Unless otherwise specified, Vcc = 1.7V to 5.5V, T_A = 40 C to 85)

		≤			≤ ≤			

≤

/ Functional Block Diagram



/ Functional Description

/ Data Input

SDA

SDA

SCL

(1) SCL

SDA

(1)

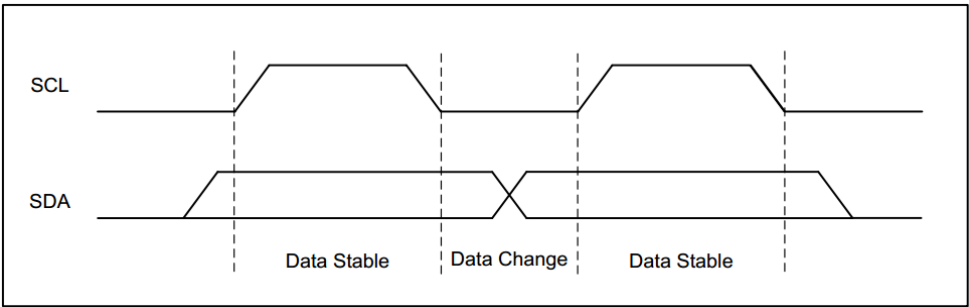


Figure 1 Data Validity

/ Start Condition

SCL

SDA

2

/ Stop Condition

SCL

SDA

BRCM24C02SC

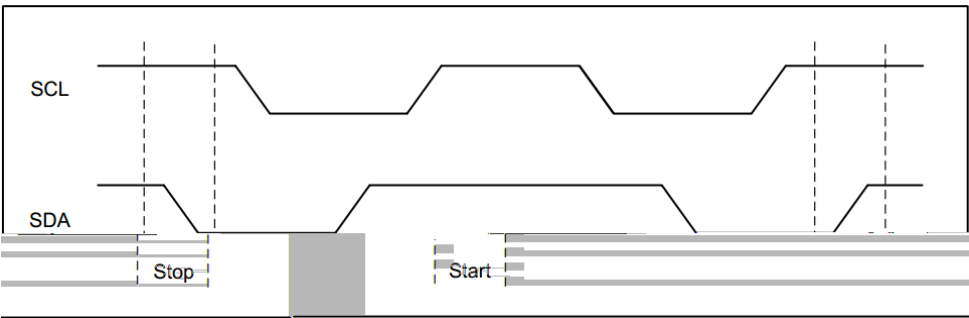


Figure 2 Start and Stop Definition

ACK / Acknowledge

ACK

BRCM24C02SC

BRCM24C02SC

" 0 "

9

/ Functional Description

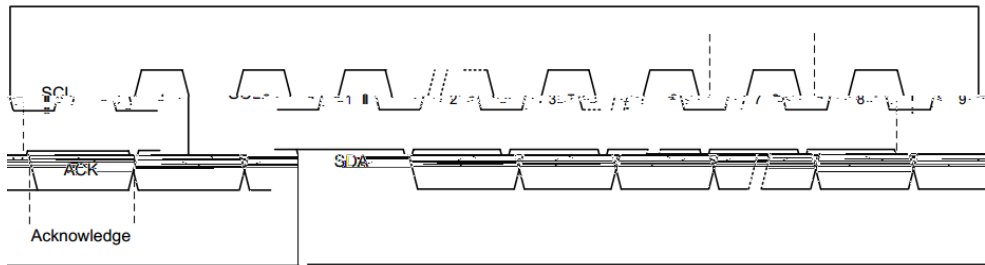


Figure 3 Output Acknowledge

/ Standby Mode

BRCM24C02SC

:(a)

,(b)

,(c)

/ Soft Reset

,(c)

4

(a)

,(b)

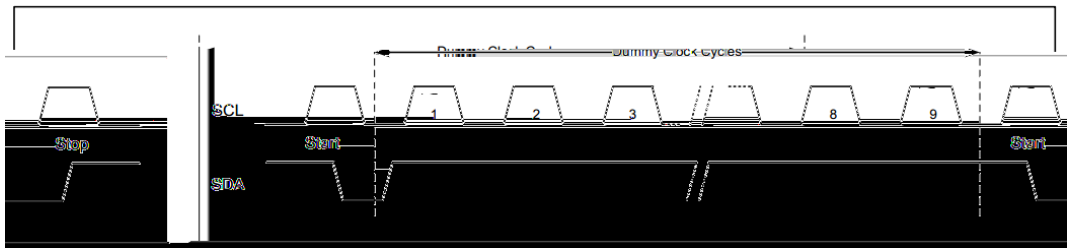


Figure 4 Soft Reset

/ Device Addressing

BRCM24C02SC

8

1

1 0

/ Functional Description

E2,E1 E0

0

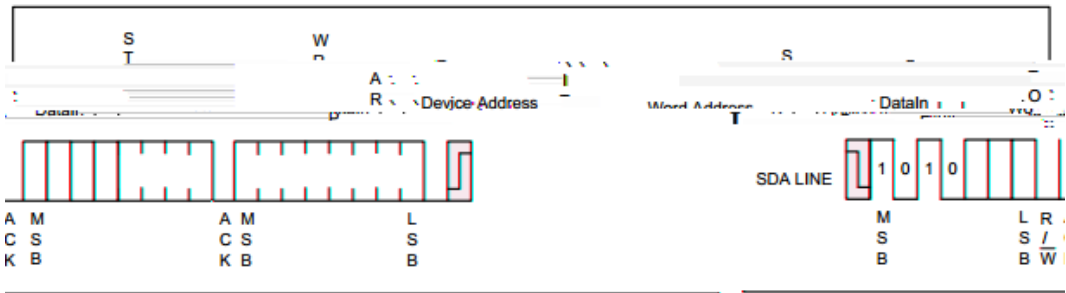
8

8 /

E2,E1 E0

0

/ Functional Description

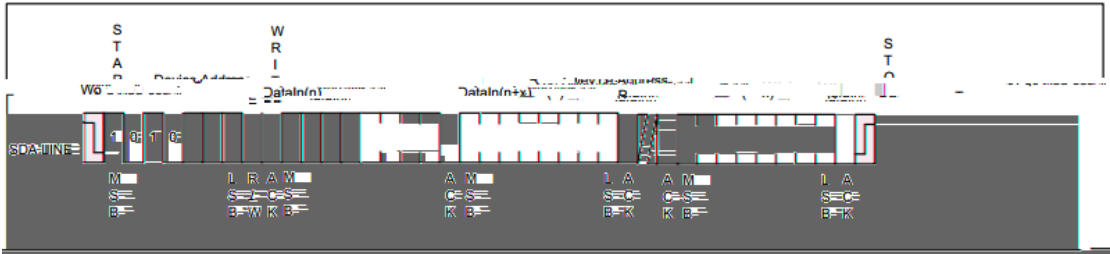


/ Page Write

BRCM24C02SC

" 0 "

BRCM24C02SC



/ Functional Description

/ Acknowledge Polling

BRCM24C02SC

/

BRCM24C02SC

" 0 "

/ Write Identification Page

16

(a)

1011b

(b)

A5 / A4

0 1

A7 / A6

" 00 "

(c)

A3 / A0

NoACK

/ Lock Identification Page

ID

Lock ID

(a)

1011b;

(b)

A6

1

;

(c)

xxxx xx1x

x

0

1

/ Functional Description

/ Read Operations

/ ; / “ 1 ”

/ Current Address Read

1
/ “ 1 ” BRCM24C02SC
“ 0 ” 7

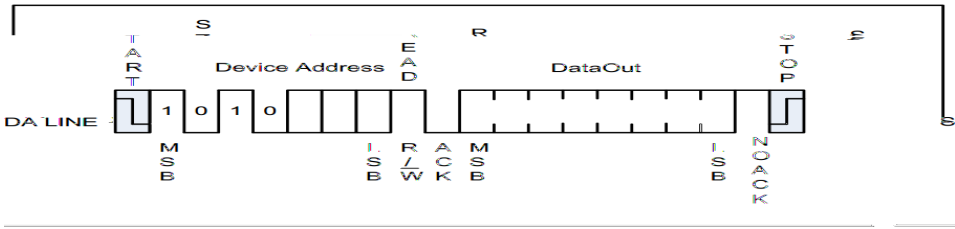


Figure 7

/ Random Address Read

“ ”
BRCM24C02SC /
BRCM24C02SC
“ 0 ” 8

/ Functional Description

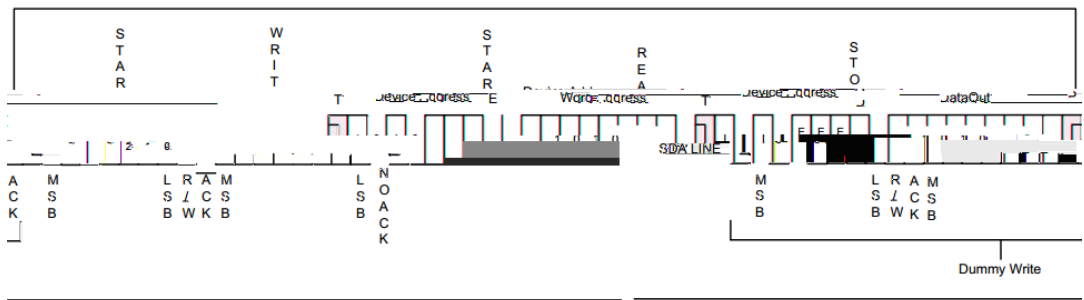


Figure 8 Random Address Read

/ Sequential Read

BRCM24C02SC

“ 0 ”

9

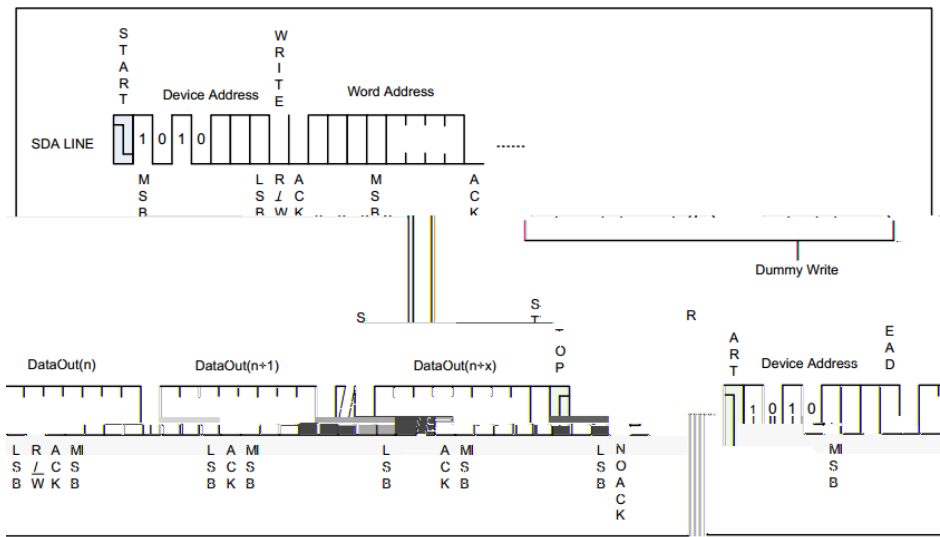


Figure 9

/ Read Identification Page

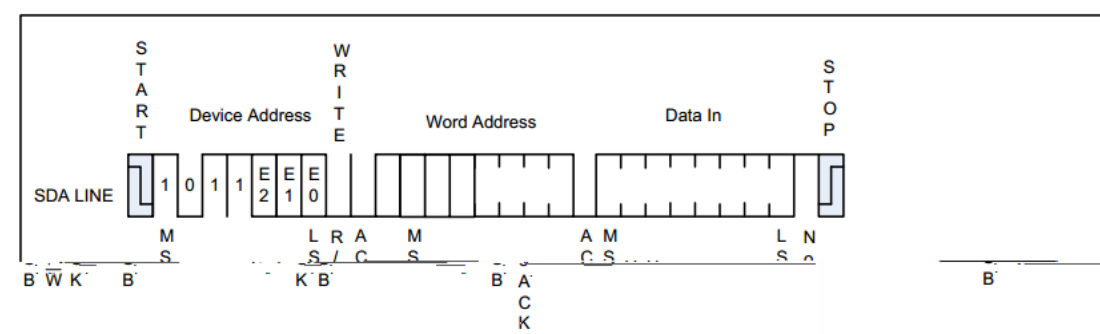
16

1011b A7 / A6 0 A5 A4 / A0 ID

10d 6 ID

16

/ Read the Lock Status

$$\frac{[ACK] + [NoACK]}{10}$$


/ Read Serial Number

16

1

128

EEPROM

“ ”

EEPROM

1

/ Functional Description

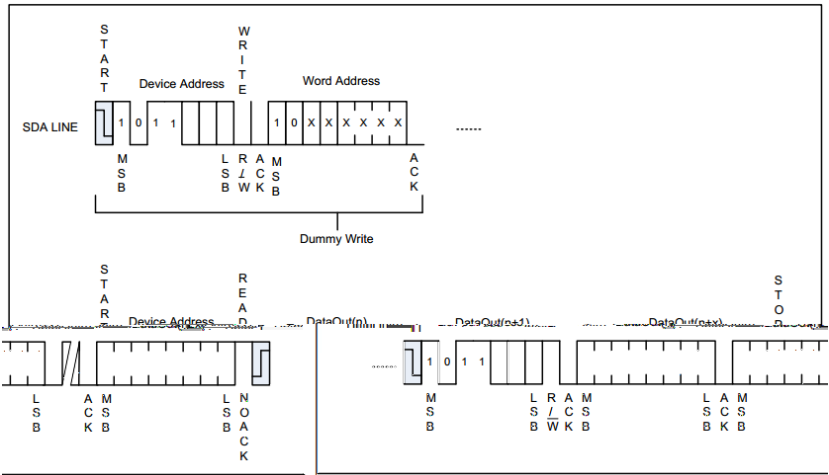
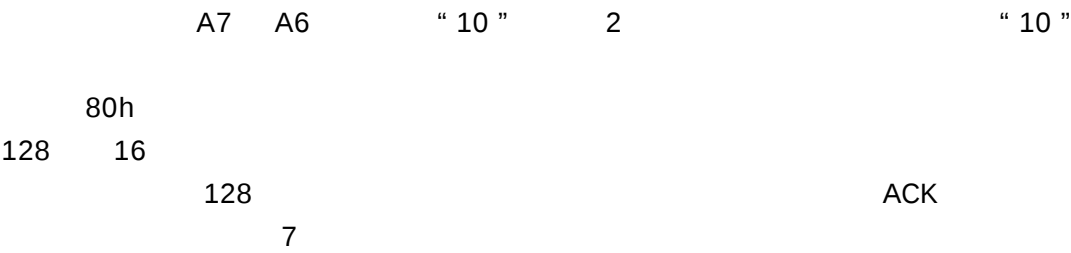
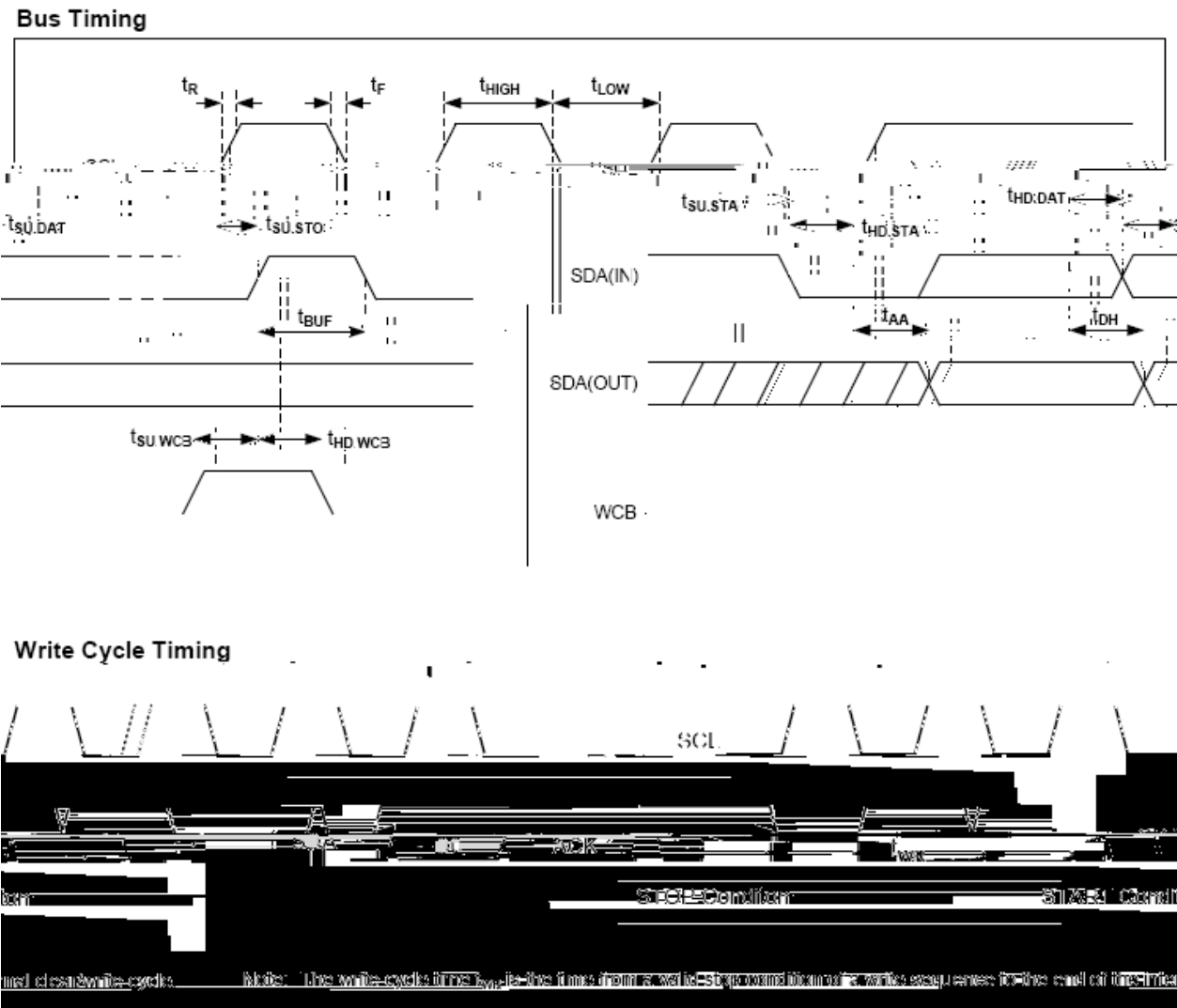
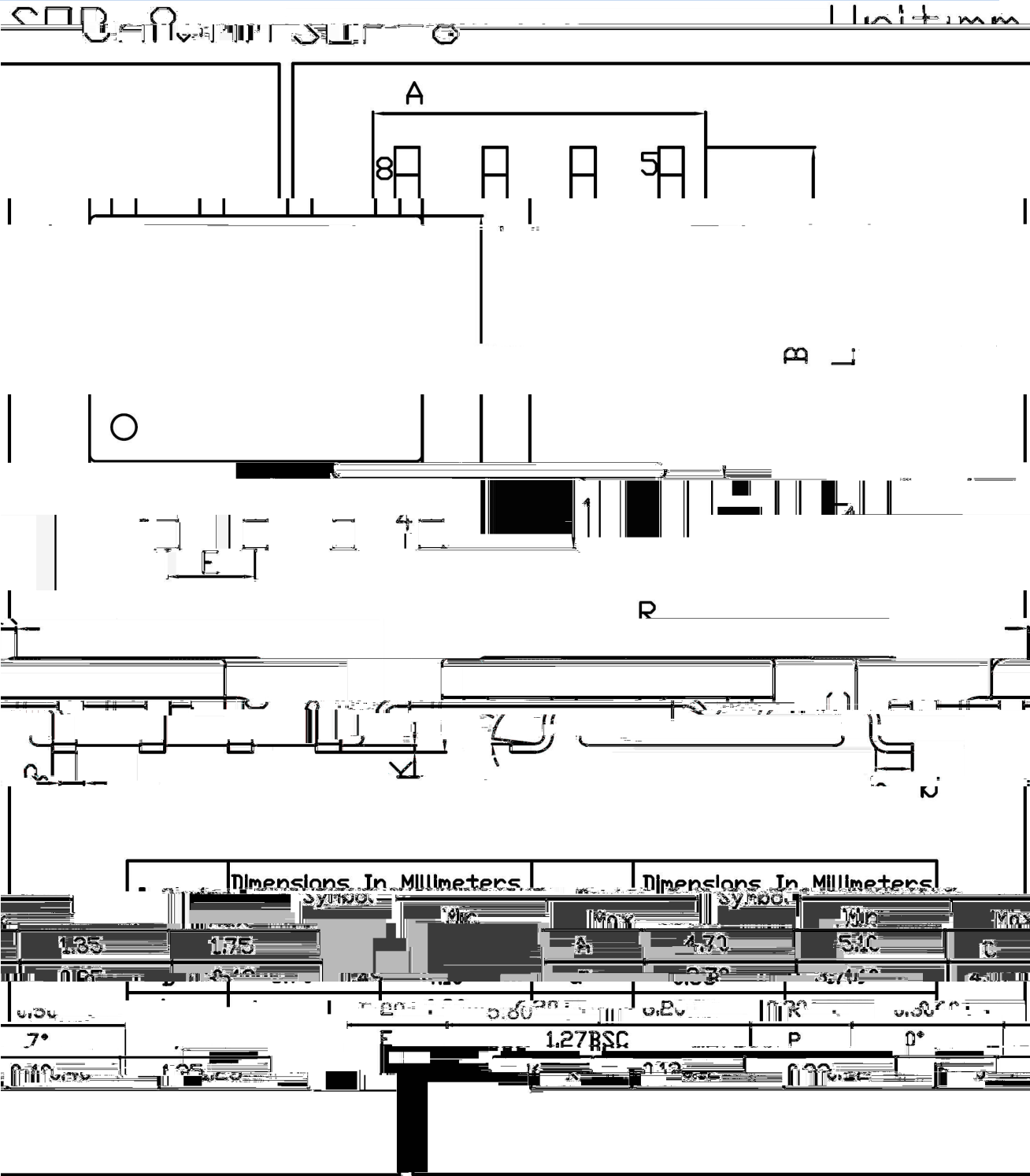


Figure 11 Sequential Read

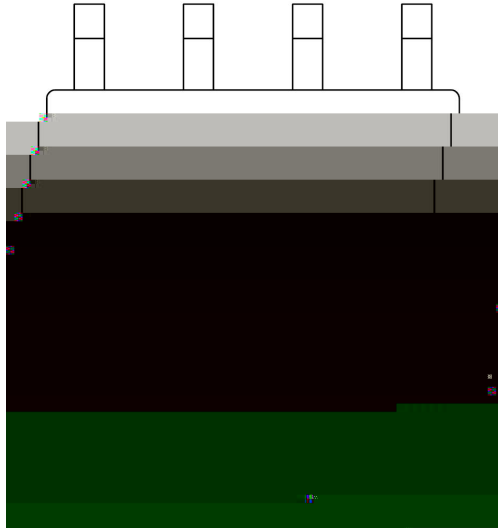
/ Time Sequence Diagram



/ Package Dimensions

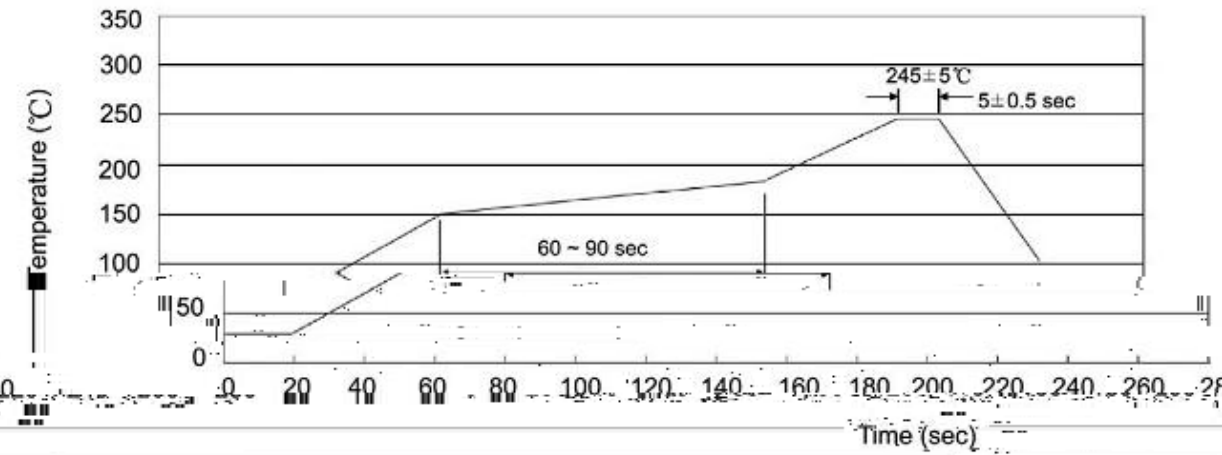


/ Marking Instructions



24C02

() /



± ± ± ±

/ Resistance to Soldering Heat Test Conditions

± ± ± ±

/ Packaging SPEC.

	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
SOP/ESOP-8	4,000	2	8,000	6	48,000	13 ×12	360×360×50	380×335×366

/ Notices