

G

To-Type SMD Programmable AD Pyroelectric Infrared Sensors

S23-S340R

V1.

1.

1.1

ISO14001

ISO14001

ISO 9001

ISO - “ ISO 9001 ”

1.2 ROHS

ROHS “ 2011/65/EC ”
ROHS

1.3

1.3.1

1.3.2

IC
PIR MCU S23-S340R
MCU MCU
MCU PIR
14

2.

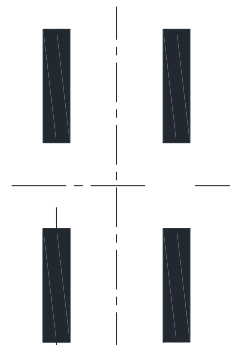
3.2

SMD

3.3

USB

3.4



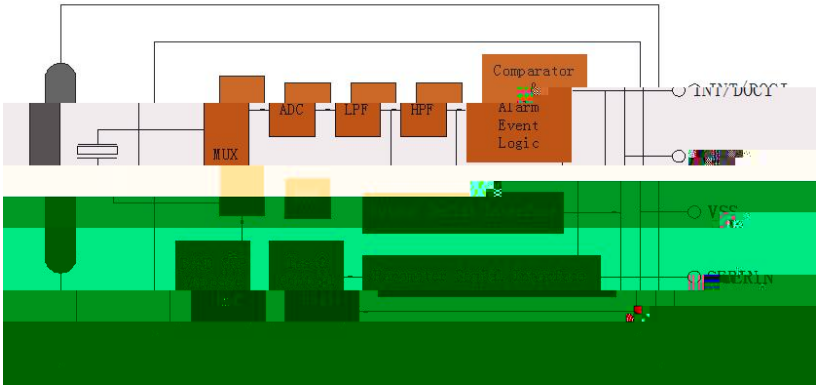
1

±

(unit): mm

3.5

	TST	-20	70		
	θ	X=120 °	Y=90 °	°	
	TST	-30	80		
	λ	5	14	μm	



3.6 (VDD = +3V TAMB = +25 50 ± 10%)

SER IN						
INT/DOCI						

3.7

S23-S340R PIR

 ADC

3.7.1.

- 1 MUX ADC PIR

- 2 (BAND GAP Volatage Ref)

- 3 (OSC) 64kHz

- 4 (LPF HPF) 7Hz 0.4Hz

- 5 (Comparator&Alarm Event Logic)

= 1 =

7) ADC

ADC	ADC	:
PIR	BFP	= 0
PIR	LPF	= 1
	= 2	
\$ _	= 3	

“ 0 ” “ 1 ”

8)

9

1=7? 0=-.

3.7.3

SERIN

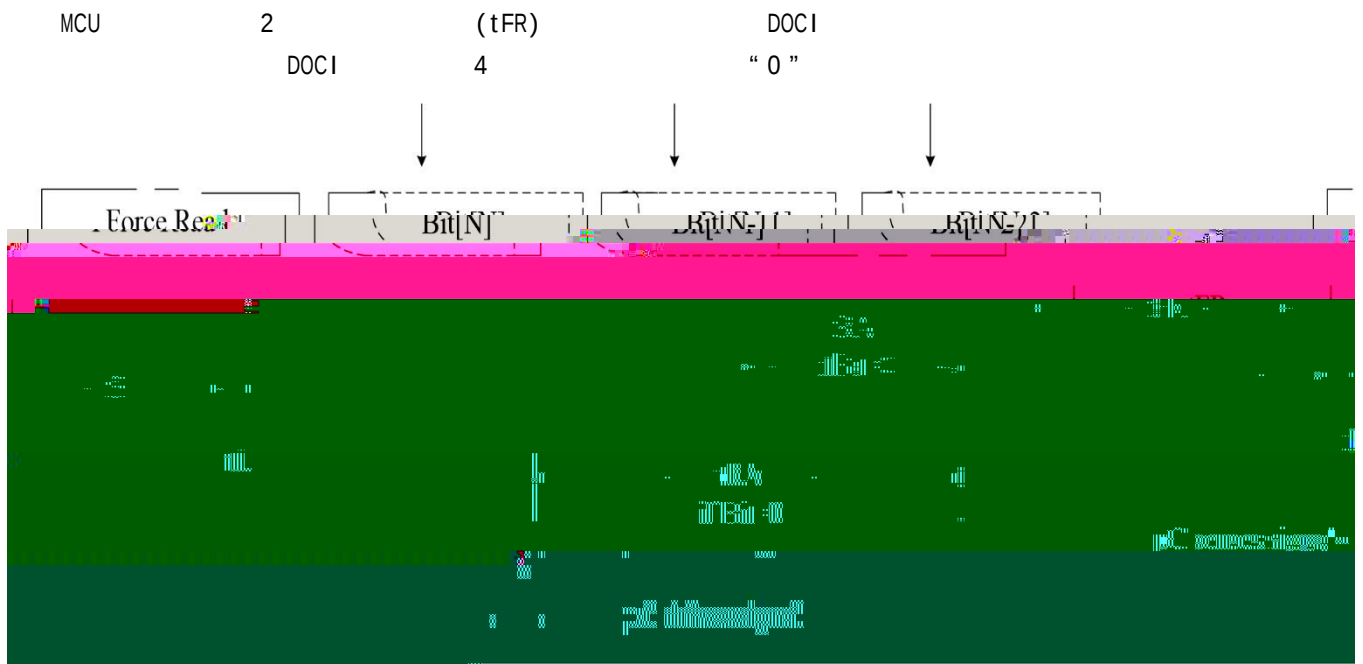
SERIN

0 1

(0/1) > E c Ê A ä A ä, R g d 1 t R Ò à

3.7.4

DOCI



ADC

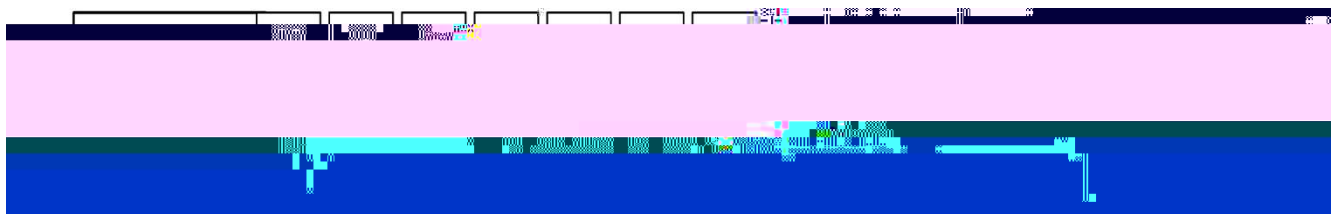
DOCI / INTR

ADC

512

PIR

DOCI



[6:5]	[1:0] ADC	0 = PIR (HPF) 1 = PIR (LPF) 2 = 3 =
[4:1]		
[0]		1= 0=

3.8

3.8.1 PIR

1)

ADC [6:5] PIR LPF (=1)
 $V_{PIR} = (ADC_out - ADC_offset) * 6.5\mu v$

2)

ADC [6:5] PIR HPF (=0)
 $V_{PIR} = ADC_out * 6.5\mu v$

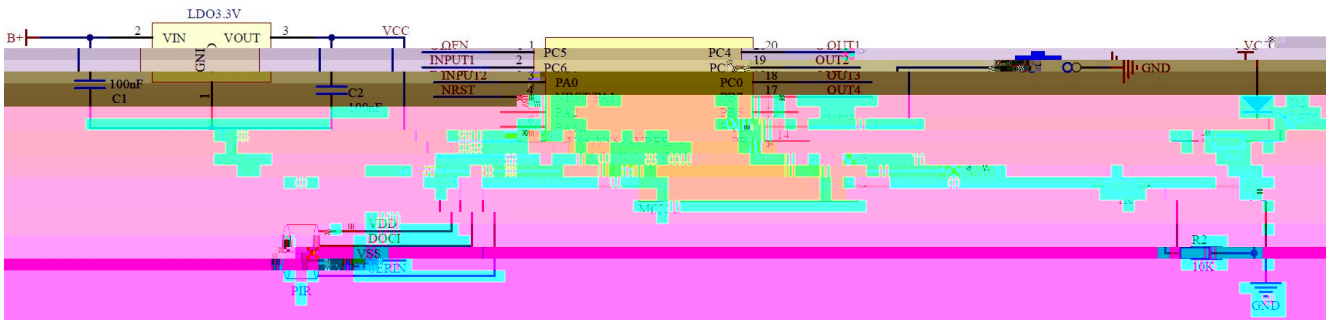
3.8.2

ADC [6:5] (=2)
 $V_{DD} = (ADC_out - ADC_offset) * 650\mu V.$

3.8.3

ADC [6:5] (=3)
 $= T_{cal} + (ADC_out - ADC_offset(T_{cal})) / 80 * count / K$
 $ADC_offset = ADC @ V_{IN} = 0 = 2^{13}$
 $ADC_offset(T_{cal}) = ADC = 8200@300k$

4.



7.1.6

SO₂

CL₂, NO_x

7.1.7

72h

40 ± 10%RH

7.1.8

3

7.2

7.2.1

7.2.1.1

7.2.1.2

7.2.1.3

7.2.1.4

1

SO₂ CL₂, NO_x

2

3

4

5

6

7

8

7.2.2

1

2

3

4

5 *

6

7

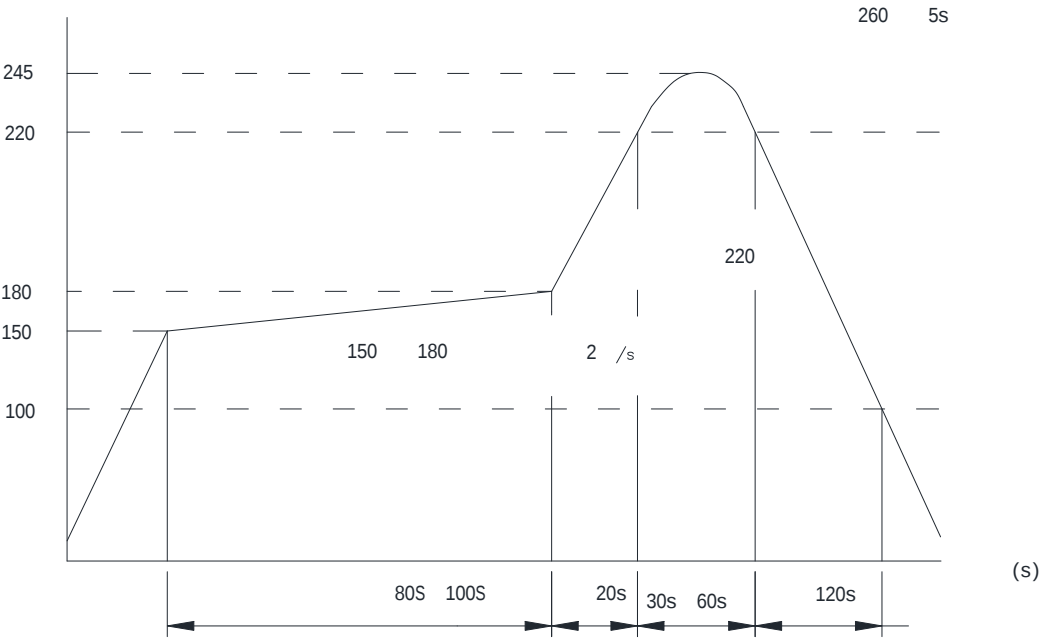
8

7.3

7.3.1	7		
7.3.2	PIR	PIR	3

7.3.3

7.3.4



- 1
- 2 *
- 3 *
- 4 *

“ ”