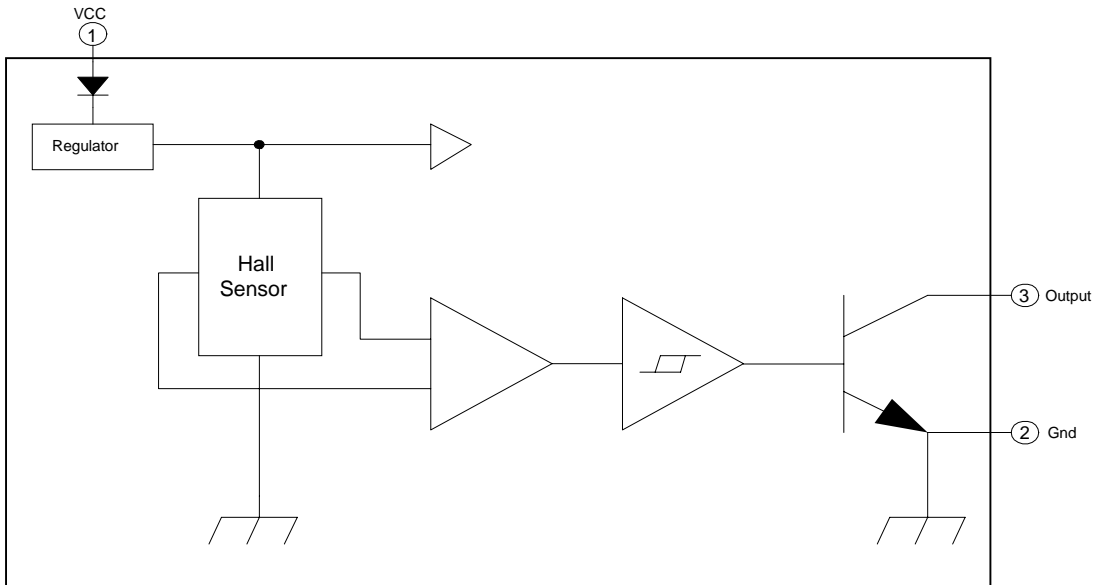
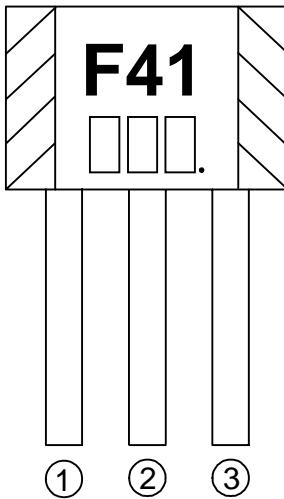


FUNCTIONAL BLOCK DIAGRAM



MARK VIEW

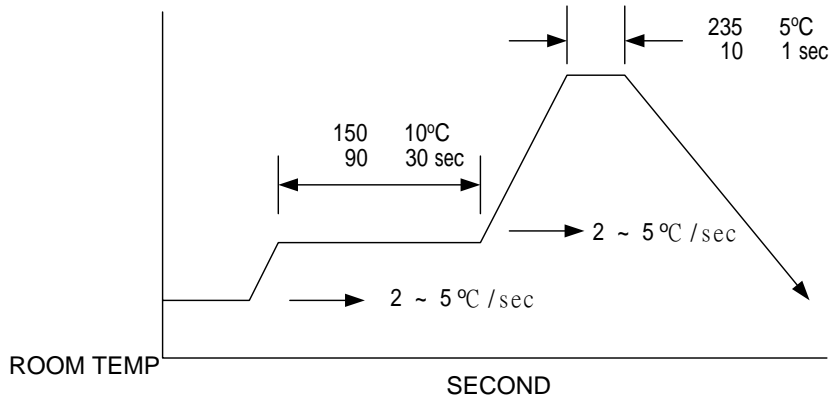


PIN DESCRIPTION

NAME	NO.	STATUS	DESCRIPTION
VCC	1	P	IC Power Supply
GND	2	P	IC Ground
Output	3	O	It is low state during the N magnetic field.

ABSOLUTE MAXIMUM RATINGS

VCC Pin Voltage	20V
Output OFF Voltage, Vce	30V
Output ON Current (Io)	
Continuous Current	50mA
Power Dissipation	
Ta=25	400mW
Operating Temperature Range	-40 °C +150 °C
Storage Temperature Range	-65 °C +150 °C
Junction Temperature	+150 °C
Lead Temperature (Soldering, 10 sec)	+230 °C



Soldering Condition

DC ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Minimum Operating Voltage	V_{CC}	No use pin is open (Fig1)		3.0		V
Maximum Operating Voltage	V_{CC}	No use pin is open (Fig1)		20.0		V
Quiescent Supply current	I_{CC}	No use pin is open V_{CC} : 3.0V 20V (Fig1)		3.7	10	mA
Output Saturation Voltage	V_{SAT}	$V_{CC}=12V$, $I_o = 50mA$ (Fig1)		400	500	mV

Note: Fig1 The IC output state is under N magnetic field.

Output Saturation Voltage Vs. Output Current(I_o) $V_{CC}=12V$, Temp.=25 °C

Output Current (I_o), unit:mA	Saturation Voltage Unit:V	Note
5	0.05	
15	0.13	
25	0.19	
35	0.27	
45	0.35	
50	0.40	

AC ELECTRICAL CHARACTERISTICS

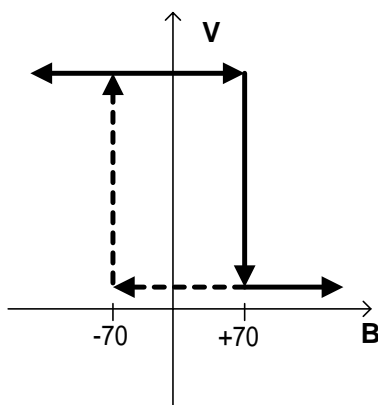
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Rise time	(t_r)	$R_L=820$ $C_L=20pF$ (Fig1)		0.2		μS
Fall time	(t_f)	$R_L=820$ $C_L=20pF$ (Fig1)		0.5		μS

MAGNETIC CHARACTERISTICS

FS41LF- A	Ta=-40 °C +150 °C		
PARAMETER	MIN	MAX	UNIT
Bop		+70	G
Brp	-70		G
Bhys		140	G

FS41LF- B	Ta=-40 °C +150 °C		
PARAMETER	MIN	MAX	UNIT
Bop		+90	G
Brp	-90		G
Bhys		180	G

FS41LF- C	Ta=-40 °C +150 °C		
PARAMETER	MIN	MAX	UNIT
Bop		+120	G
Brp	-120		G
Bhys		240	G



OUTPUT PIN

TEST CIRCUITS:

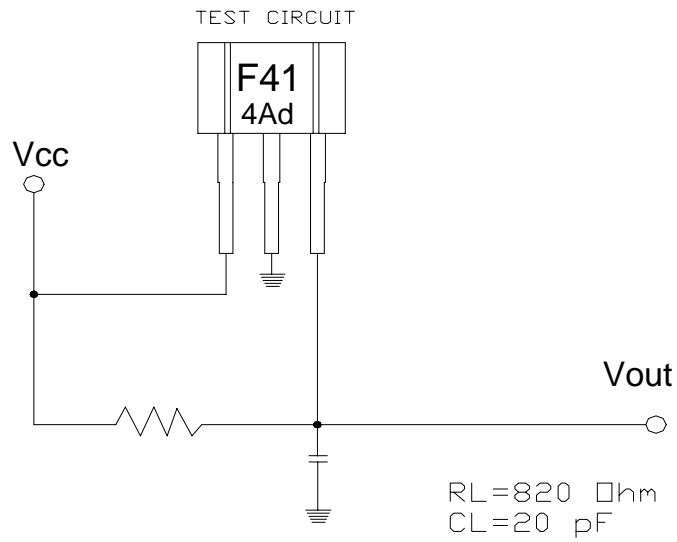


Fig 1

HALL SENSOR LOCATION

The Fig 2 is the hall sensor location, where marks the IC number.

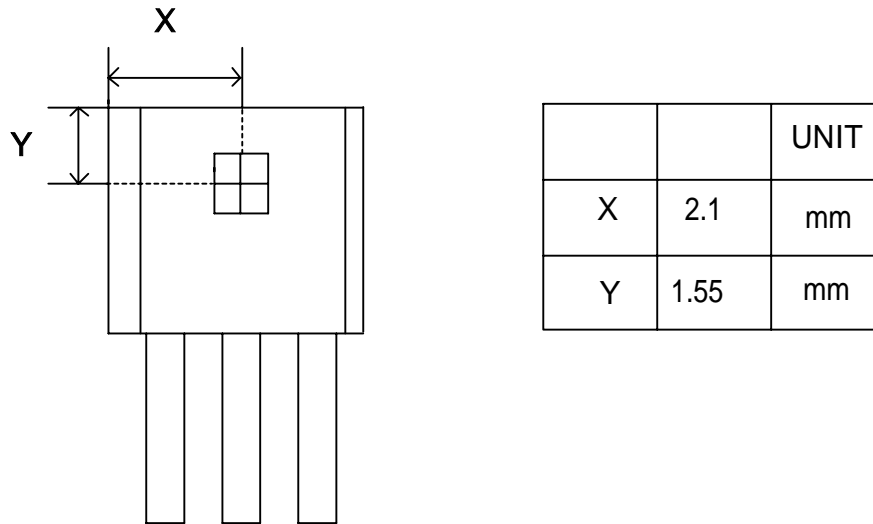
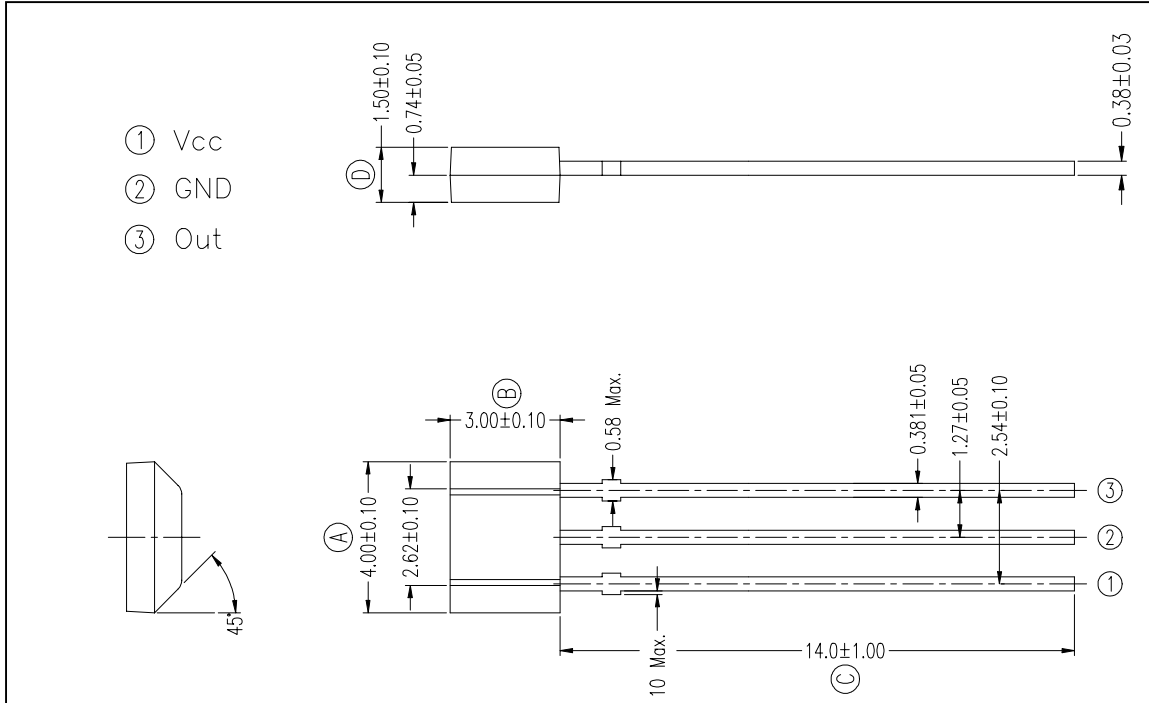


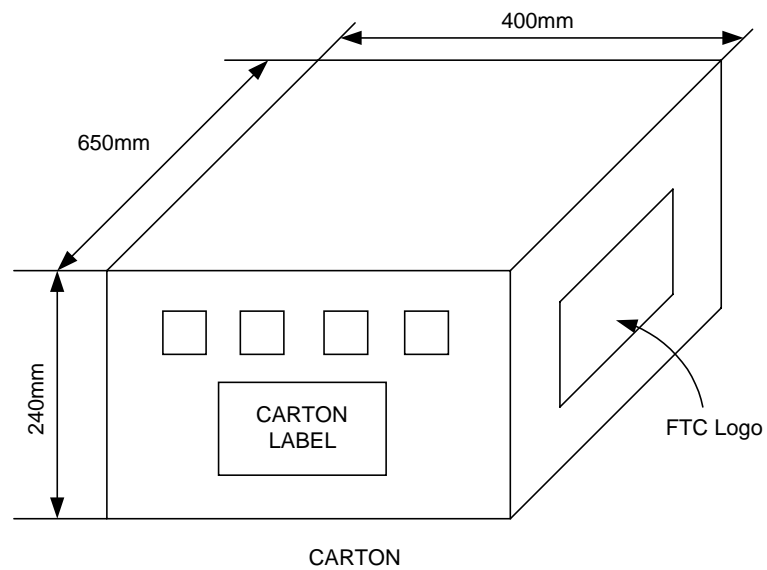
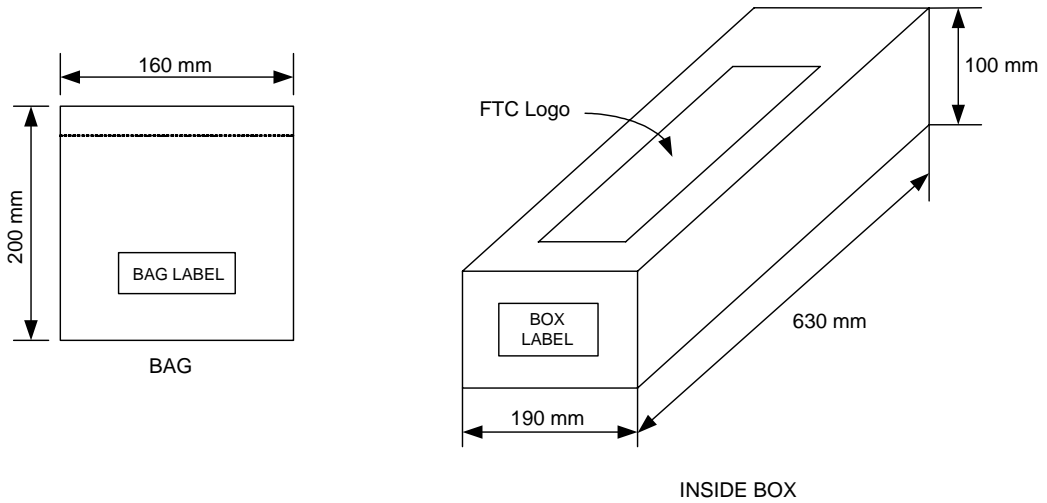
Fig 2 FS41 Hall Sensor Location

PACKAGE OUTLINE (LEAD FREE)



PACKING SPECIFICATIONS

BAG & BOX DIMENSION



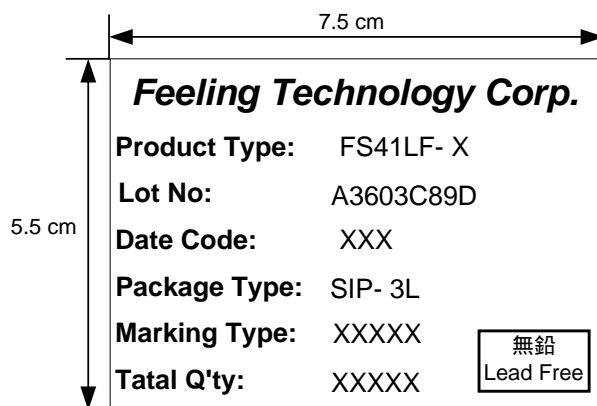
PACKING QUANTITY SPECIFICATIONS

1000 EA / 1 BAG

25 BAGS / 1 INSIDE BOX

4 INSIDE BOXES / 1 CARTON

LABEL SPECIFICATIONS



BAG LABEL, INSIDE BOX & CARTON LABEL

ORDER INFORMATION

Part Number	Operating Temperature	Package	Description
FS41LF- A	-40 °C ~ +150 °C	TO-92SP-3	± 70G (B)
FS41LF- B	-40 °C ~ +150 °C	TO-92SP-3	± 90G (B)
FS41LF- C	-40 °C ~ +150 °C	TO-92SP-3	± 120G (B)