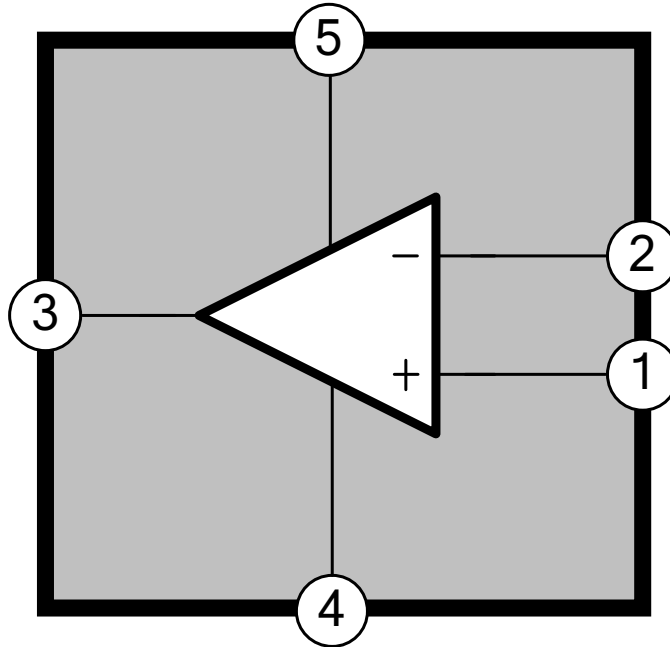


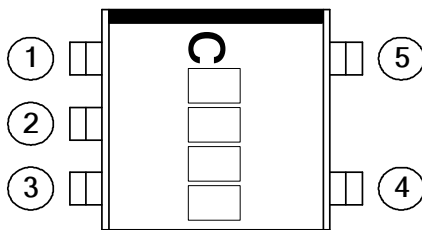


## FUNCTIONAL BLOCK DIAGRAM

SOT-23-5L



MARK VIEW



PIN DESCRIPTION

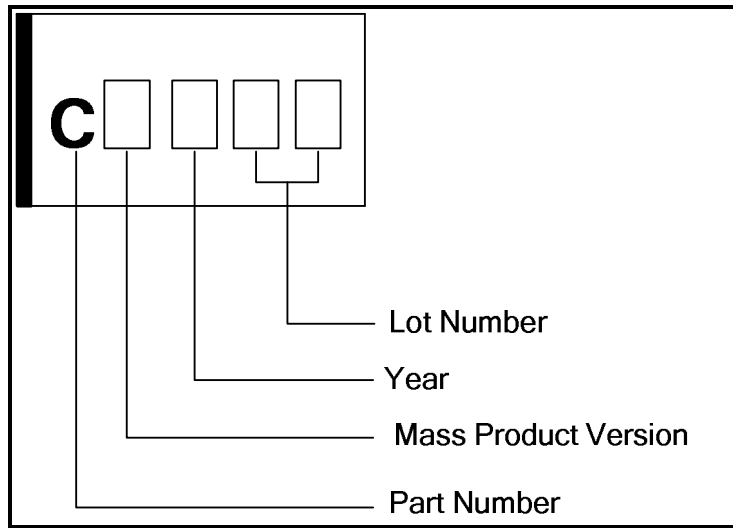
NAME	NO.	STATUS	DESCRIPTION
IN+	1	I	OPA Non-Inverting Input
IN-	2	I	OPA Inverting Input
OUT	3	O	OPA Open Collector Output
GND	4	P	IC Ground
VCC	5	P	IC Power Supply

## ORDER INFORMATION

Part Number	Op. Temperature	Package	Description
FP703K-LF	-20°C ~ 85°C	SOT-23-5L	
FP703KR-LF		SOT-23-5L	Tape & Reel

## IC DATE CODE DISTINGUISH

SOT23-5L



### For example:

- 1 – Year 2001
- 2 – Year 2002
- 3 – Year 2003 ----- And so on

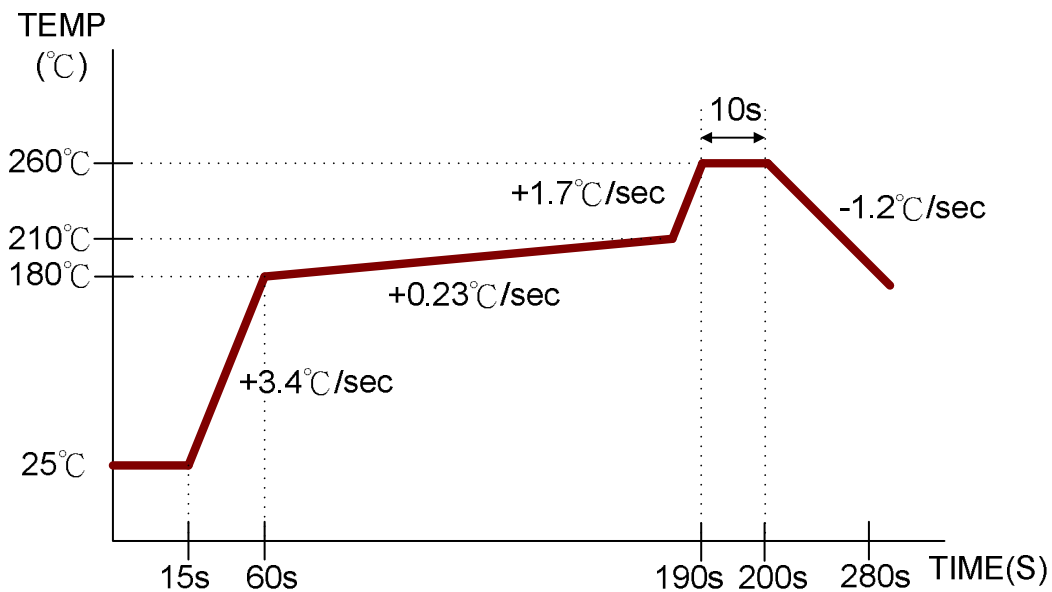
Lot Number is the last two numbers

### For example:

A3311C62  
 ↳ Lot Number

## ABSOLUTE MAXIMUM RATINGS

Supply Voltage ( $V_{CC}$ )	+25V
Input Voltage	-0.3V~+VCC
Differential Input Voltage ( $V_{id}$ )	$\pm 20V$
Output Voltage	+25V
Output Sink Current	+30mA
Maximum Junction Temperature	+150°C
Thermal Resistance Junction to Ambient ( $\theta_{ja}$ )	
SOT-23-5L	400°C/W
Power Dissipation ( $P_D$ )	
SOT-23-5L	250mW
Operating Temperature Range	-20°C ~ 85°C
Storage Temperature Range	-65°C ~ +150°C
Lead Temperature (soldering, 10 sec)	+260°C



**IR Re-flow Temperature vs. Second Curve**

**Note:**

- Suggest IR Reflow Soldering Profile Condition.**

## DC ELECTRICAL CHARACTERISTICS (Ta=25°C, V<sub>CC</sub>=12V, unless otherwise noted)

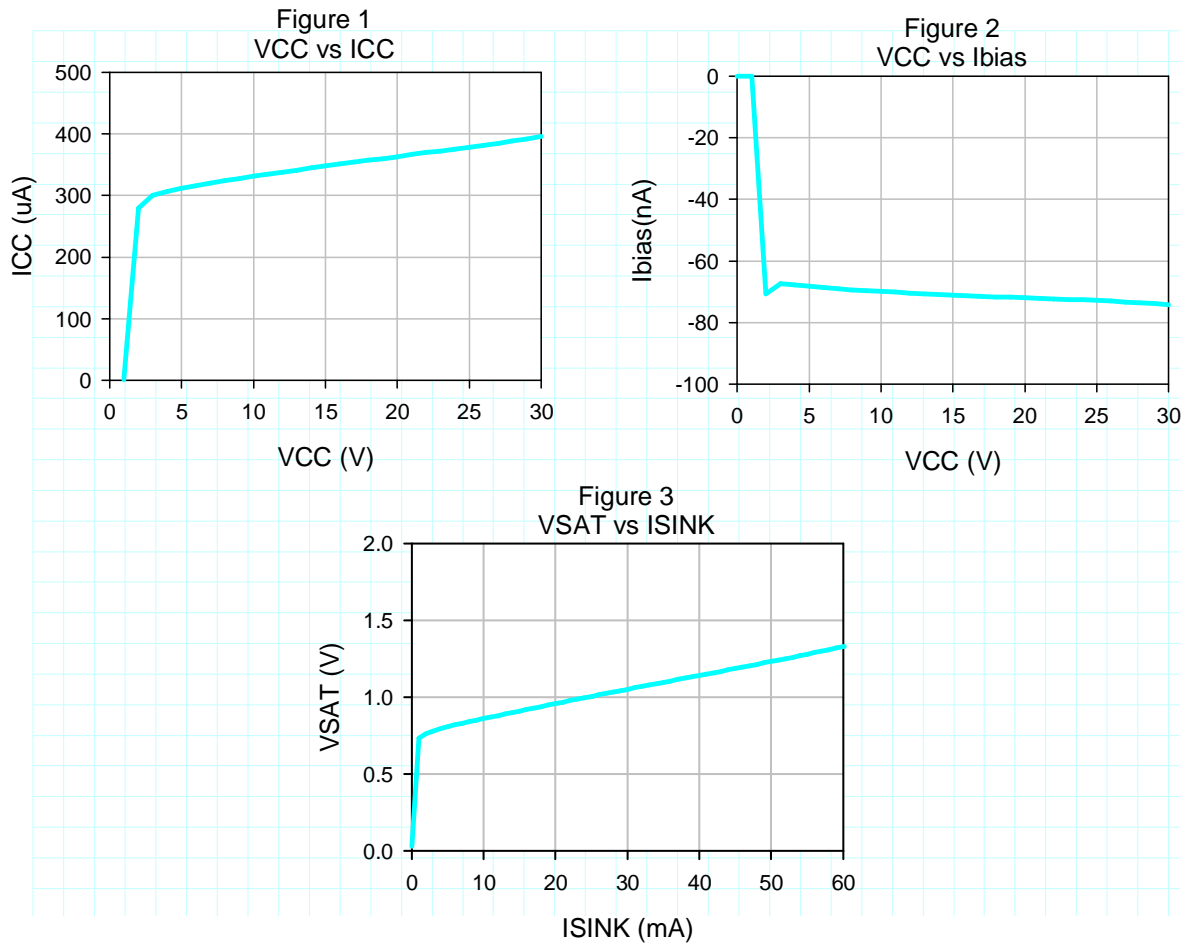
### Operating Amplifier

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input Offset Voltage	V <sub>io</sub>	T <sub>amb</sub> =25°C		1	3	mV
		T <sub>min</sub> ≤ T <sub>amb</sub> ≤ T <sub>max</sub>			5	
Input Offset Voltage Drift	DV <sub>io</sub>			7		μV/°C
Input Bias Current	I <sub>ib</sub>	T <sub>amb</sub> =25°C		-80	-250	nA
		T <sub>min</sub> ≤ T <sub>amb</sub> ≤ T <sub>max</sub>			-500	
Large Signal Voltage Gain	A <sub>vd</sub>			50		V/mV
Output Sink Current	I <sub>SINK</sub>	V <sub>id</sub> = -0.8V · V <sub>OUT</sub> = 1.2V		30		mA
Low Level Output Voltage	V <sub>OL</sub>	V <sub>id</sub> = -0.8V · I <sub>SINK</sub> = 20mA		0.9	1	V
Output Leakage Current	I <sub>LEAK</sub>	V <sub>OUT</sub> = 25V · V <sub>id</sub> = 0.8V		0.1	1	uA

### Total Supply Current

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
IC Supply Current	I <sub>CC</sub>	V <sub>CC</sub> = 25V		0.4		mA

**TYPICAL CHARACTERISTICS** ( $T_a=25^{\circ}\text{C}$ ,  $V_{CC}=12\text{V}$ , unless otherwise noted)



TYPICAL CHARACTERISTICS (Ta=25°C, V<sub>CC</sub>=12V, R<sub>out</sub>=2K)

### IN- to Vout Delay Time

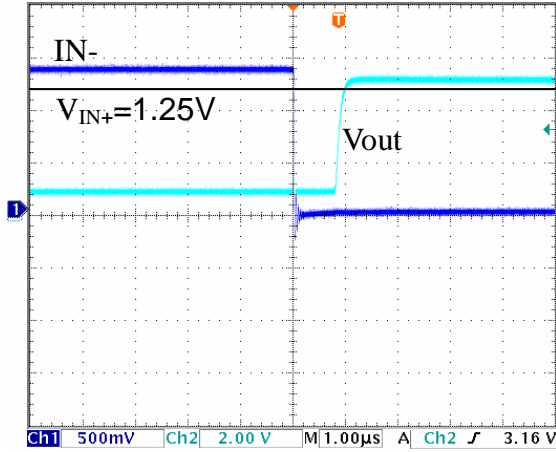


Figure 4

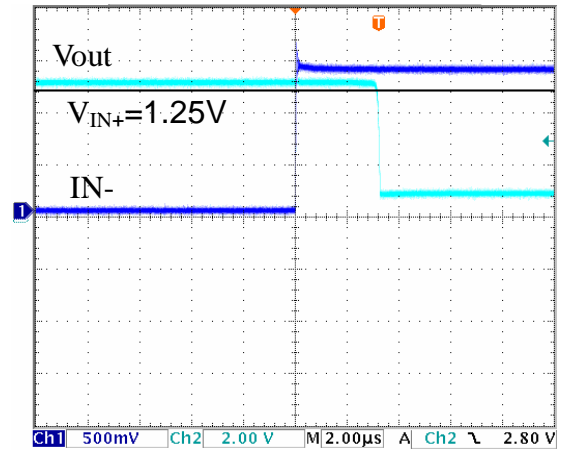
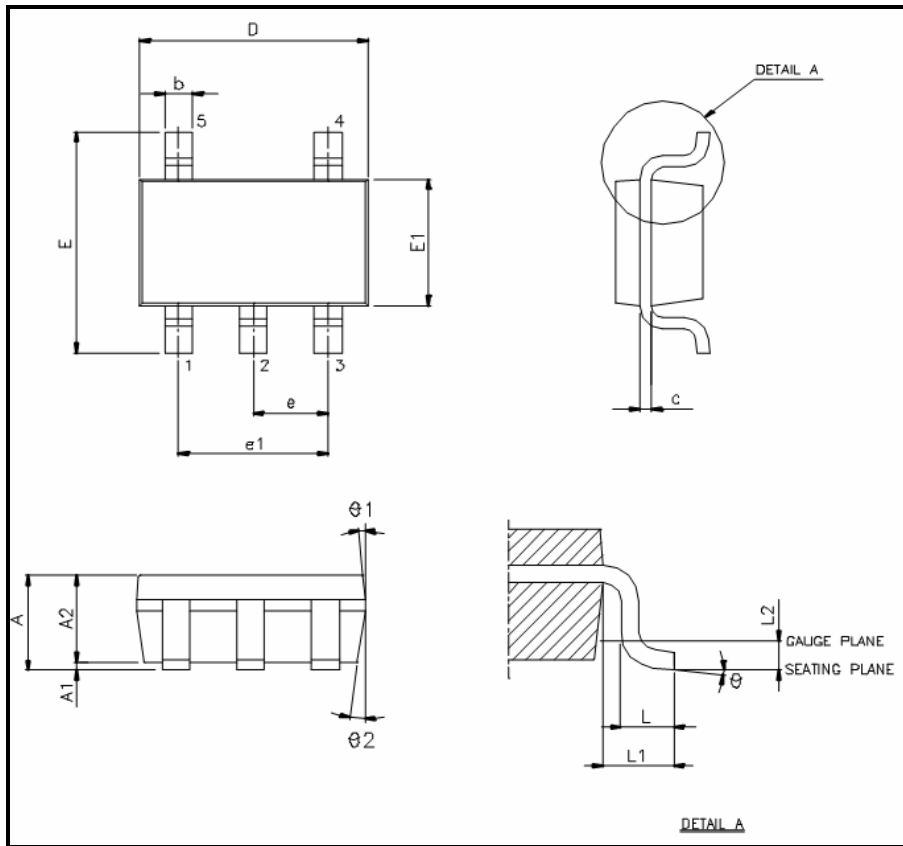


Figure 5

## PACKAGE OUTLINE

SOT-23-5L



SYMBOLS	MIN	MAX
A	1.05	1.35
A1	0.05	0.15
A2	1.00	1.20
b	0.25	0.50
c	0.08	0.20
D	2.70	3.00
E	2.60	3.00
E1	1.50	1.70
e	0.95 BSC.	
e1	1.90 BSC.	
L	0.30	0.55
L1	0.60 REF.	
L2	0.25 BSC.	
θ°	0	10

UNIT:mm

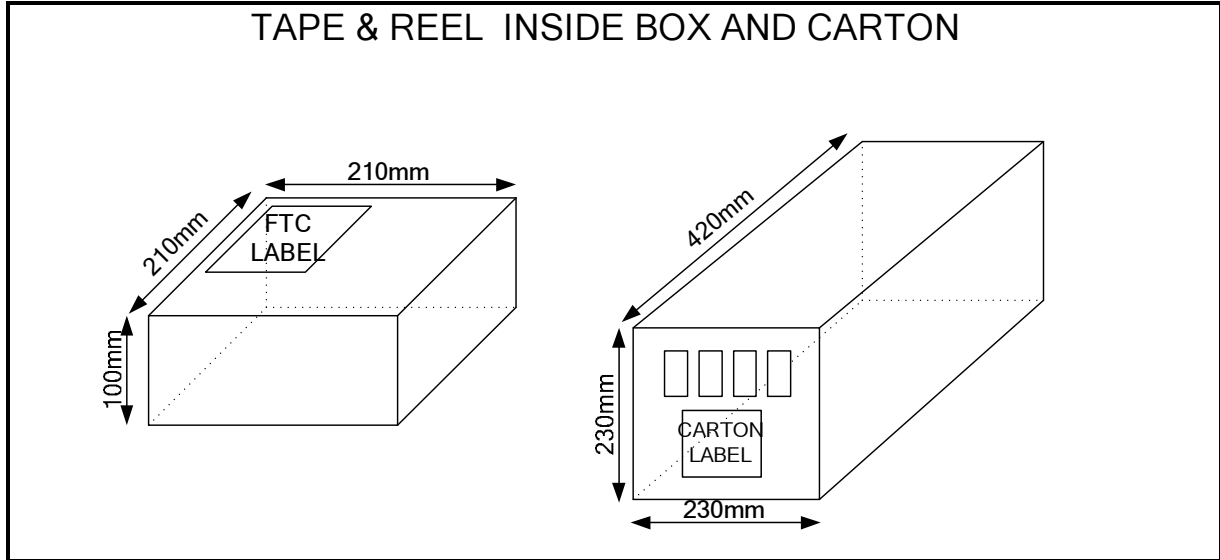
### NOTE:

1. JEDEC OUTLINE:MO-178 AA ◦

**PACKING SPECIFICATIONS**

**BOX & CARTON DIMENSION**

SOT-23-5L



**PACKING QUANTITY SPECIFICATIONS**

<b>SOT-23-5L</b>
2500 EA / REEL
4 REELS / INSIDE BOX
4 INSIDE BOXES / CARTON

**LABEL SPECIFICATIONS**

**REEL & BAG**

Feeling Technology Corp		
Product:FP703KR-LF		
Lot NO: XXXXXXXX		
D/C: cxxx	<table border="1"><tr><td>無鉛 Lead Free</td></tr></table>	無鉛 Lead Free
無鉛 Lead Free		
Q`ty: 2500		

**CARTON**

Feeling Technology Corp		
Product Type: FP703KR-LF		
Lot No: XXXXXXXX		
Date Code: cxxx		
Package Type:SOT-23-5L		
Marking Type:Laser	<table border="1"><tr><td>無鉛 Lead Free</td></tr></table>	無鉛 Lead Free
無鉛 Lead Free		
Total Q`ty: 40K		

## CARRIER TAPE AND REEL DIMENSIONS

### SOT-23-5L

