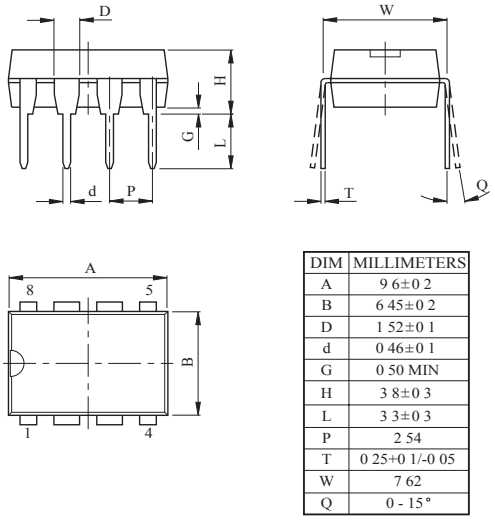
DUAL VOLTAGE COMPARATORS

This device consist of for independent voltage comparators that designed to operated from a single power supply over a wide range of voltage. Normal operation from dual supplies are also to be guaranteed on voltage range from 2V to 36V.

V_{CC} is necessary at least more 1.5 volts than the input common mode voltage. The output can be connected to other open collector outputs to achieve Wired-OR relationship.



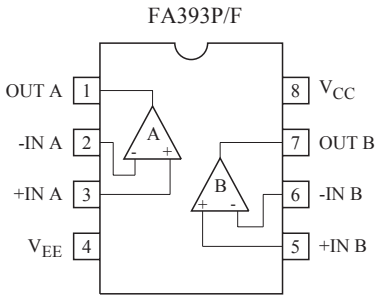
DIM	MILLIMETERS
A	9 6±0 2
B	6 45±0 2
D	1 52±0 1
d	0 46±0 1
G	0 50 MIN
H	3 8±0 3
L	3 3±0 3
P	2 54
T	0 25+0 1/-0 05
W	7 62
Q	0 - 15°

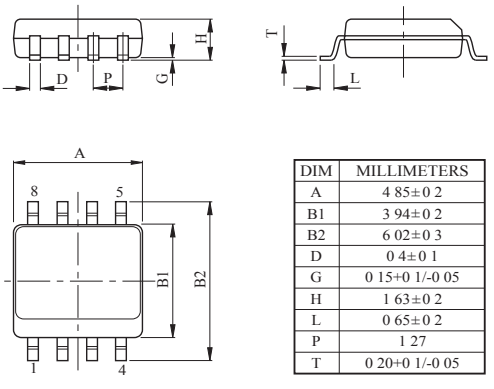
DIP-8

DUAL COMPARATOR

- Be Possible to Operate at the Wide Range Single or Two Supply Voltage.
- Low Supply Current : I_{CC}=0.8mA(Typ.).
- Low Input Offset Voltage : V_{IO}=2mV(Typ.).
- Wide Common Mode Input Voltage : $0V_{DC}$ to V_{CC}-$1.5V_{DC}$
- Output is Compatible with TTL, DTL, MOS and C-MOS.
- Low Output Saturation Voltage

PIN CONNECTION (TOP VIEW)

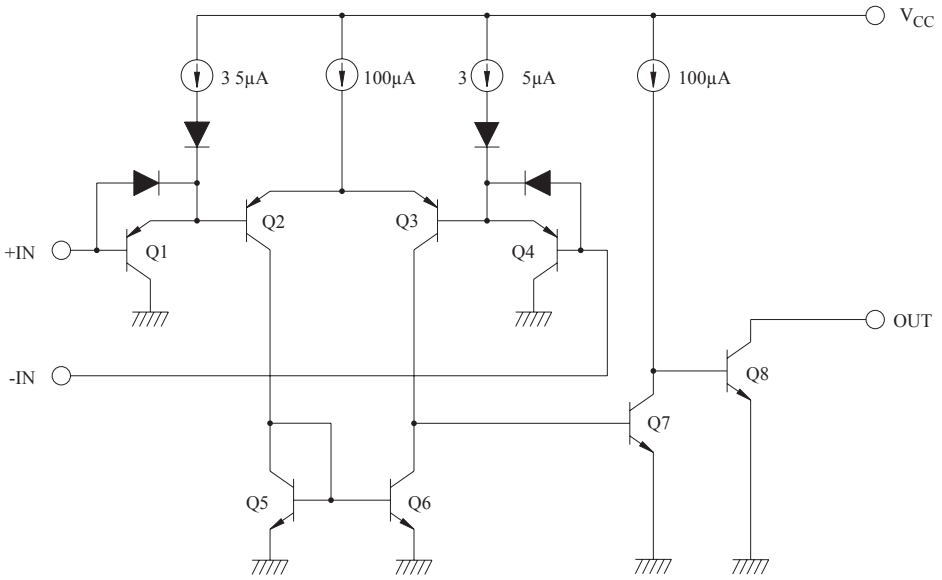




DIM	MILLIMETERS
A	4 85±0 2
B1	3 94±0 2
B2	6 02±0 3
D	0 4±0 1
G	0 15+0 1/-0 05
H	1 63±0 2
L	0 65±0 2
P	1 27
T	0 20+0 1/-0 05

SOP-8

EQUIVALENT CIRCUIT



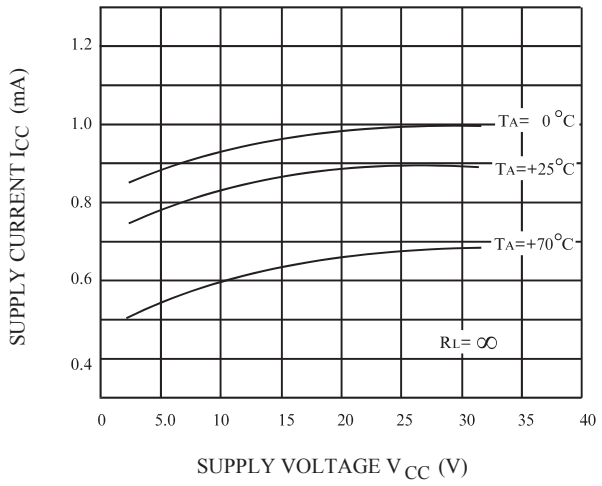
MAXIMUM RATINGS (Ta=25℃)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Supply Voltage		V_{CC}	±18, 36	V
Differential Input Voltage		DV_{IN}	±18, 36	V
Common Mode Input Voltage		CMV_{IN}	-0.3 ~ V_{CC}	V
Power Dissipation	FA393P	P_D	500	mW
	FA393F		240	
Operating Temperature		T_{opr}	-40 ~ 85	℃
Storage Temperature		T_{stg}	-55 ~ 125	℃

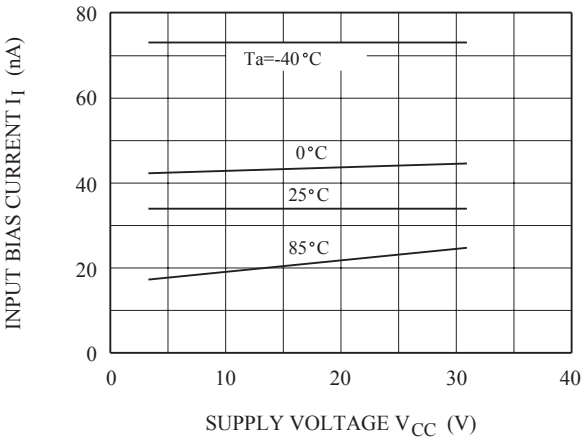
ELECTRICAL CHARACTERISTICS (V_{CC}=5V, V_{EE}=GND, Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Input Offset Voltage	V_{IO}	V_O=1.4V	-	-	5	mV
Input Offset Current	I_{IO}	-	-	-	50	nA
Input Bias Current	I_I	-	-	-	250	nA
Common Mode Input Voltage	CMV_{IN}	-	0	-	V_{CC}-1.5	V
Voltage Gain	G_V	R_L=15kΩ, V_{CC}=15V	-	200	-	V/mV
Supply Current	I_{CC}	No load	-	-	1	mA
Sink Current	I_{sink}	+IN=0V, -IN=1V, V_{OL}=1.5V	6	16	-	mA
Output Voltage ("L" Level)	V_{OL}	+IN=0V, -IN=1V, I_{sink}=3mA	-	-	0.7	V
Output Leak Current	I_{LEAK}	+IN=1V, -IN=0V, V_O=5V	-	0.1	-	nA
Response Time	t_{rsp}	R_L=5.1kΩ, C_L=15pF	-	1.3	-	μs

V - I



V_{CC} - I_I



V_{OL} - I_{SINK}