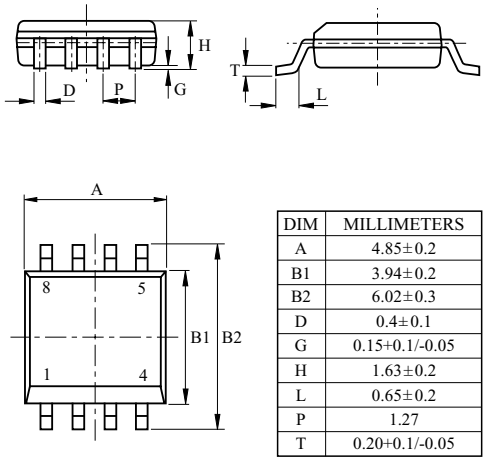
DUAL COMPARATOR

FEATURES

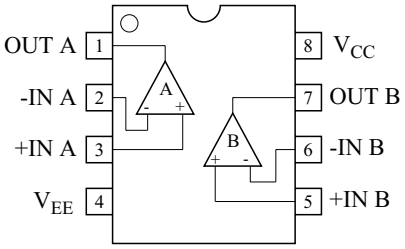
- Be Possible to Operate at the Wide Range Single or Two Supply Voltage
- Low Supply Current : I_{CC}=0.8mA(Typ.)
- Low Input Bias Current I_{IB}=25nA(Typ.)
- Low Input Offset Voltage : V_{IO}=1mV(Typ.)
- Wide Common Mode Input Voltage : $0V_{DC}$ to V_{CC}-1.5V_{DC}
- Output is Compatible with TTL, DTL, MOS and C-MOS
- Output is Open Collector and Wired-OR Possible
- Wide Operating Supply Range
  (V_{CC}=2V~36V or ±1 ~ ±18V)



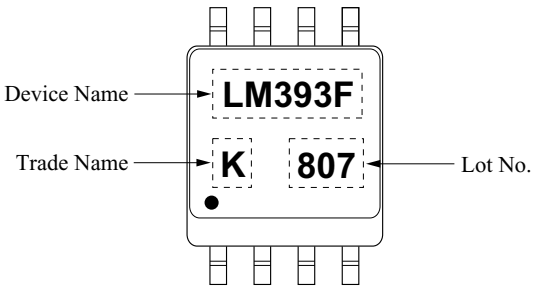
DIM	MILLIMETERS
A	4.85±0.2
B1	3.94±0.2
B2	6.02±0.3
D	0.4±0.1
G	0.15+0.1/-0.05
H	1.63±0.2
L	0.65±0.2
P	1.27
T	0.20+0.1/-0.05

FLP-8

PIN CONNECTION (TOP VIEW)



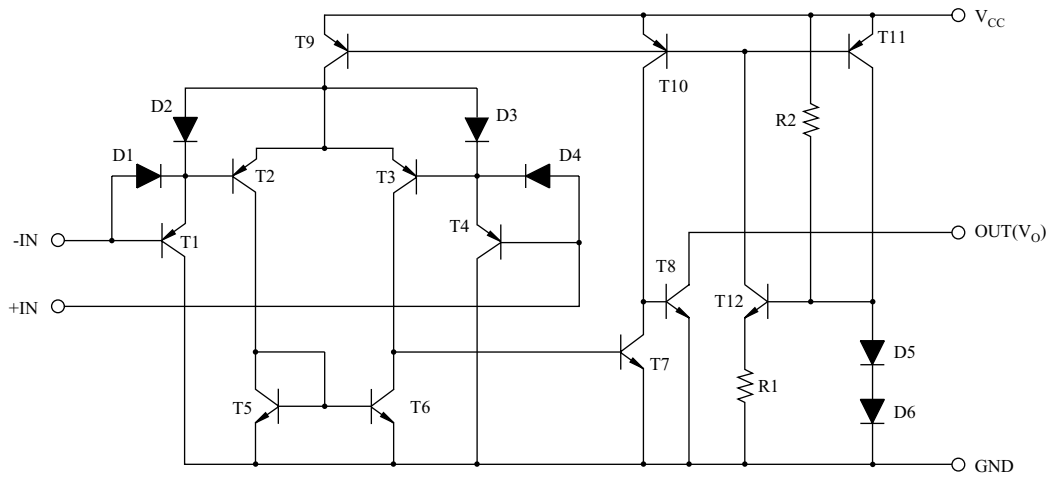
MARKING



MAXIMUM RATINGS (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V_{CC}	±18, 36	V
Differential Input Voltage	$V_{I(DIFF)}$	±18, 36	V
Input Voltage	V_I	-0.3 36	V
Power Dissipation	P_D	240	mW
Operating Temperature	T_{OPR}	-40 85	℃
Storage Temperature	T_{STG}	-65 150	℃

EQUIVALENT CIRCUIT



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

CHARACTERISTIC	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Input Offset Voltage	V_{IO}	V_{CM}=0V to V_{CC}-1.5V $V_{O(P)}$=1.4V, R_S=0Ω		-	1	5	mV
Output Saturation Voltage	V_{SAT}	V_I(-)>1V, V_I(+)=0V, I_{SINK}=4mA		-	160	400	mV
Input Offset Current	I_{IO}	-		-	5	50	nA
Input Bias Current	I_{IB}	-		-	25	250	nA
Common Mode Input Voltage	$V_{I(CM)}$	V_{CC}=30V		0	-	V_{CC}-1.5	V
Large Signal Voltage Gain	G_V	V_{CC}=15V, R_L≧15kΩ		50	200	-	V/mV
Supply Current	I_{CC}	R_L=∞ , V_{CC}=30V		-	0.8	2.5	mA
		R_L=∞		-	0.6	1.0	mA
Output Sink Current	I_{SINK}	V_I(-)>1V, V_I(+)=0V, V_O(p)<1.5V		6	18	-	mA
Output Leakage Current	I_{LEAK}	V_I(+)>1V, V_I(-)=0V	V_O(p)=5V	-	0.1	-	nA
			V_O(p)=30V	-	-	1.0	μA
Large Signal Response Time	t_{RSP}	V_{IN}=TTL Logic Wing V_{REF}=1.4V, V_{RL}=5V, R_L=5.1kΩ		-	350	-	ns
Response Time	t_{rsp}	V_{RL}=5V, R_L=5.1kΩ		-	1400	-	ns

Fig. 1 Supply Current vs Supply Voltage

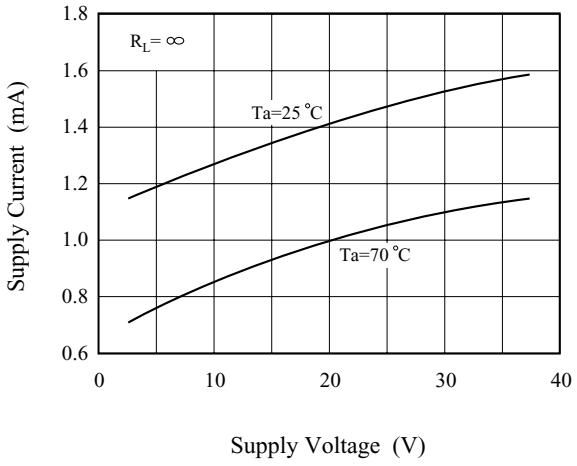


Fig. 2 Input Current vs Supply Voltage

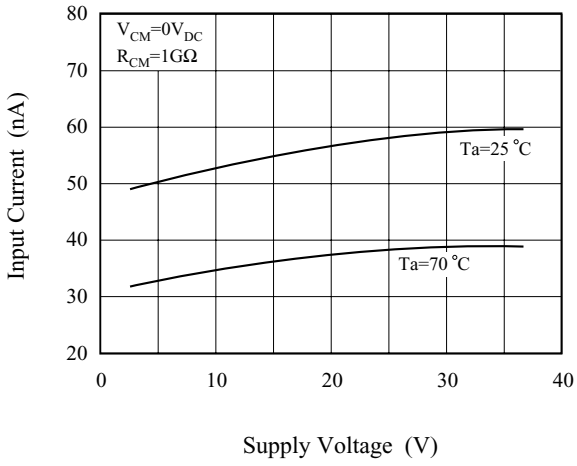


Fig. 3 Output Saturation Voltage vs Output Sink Current

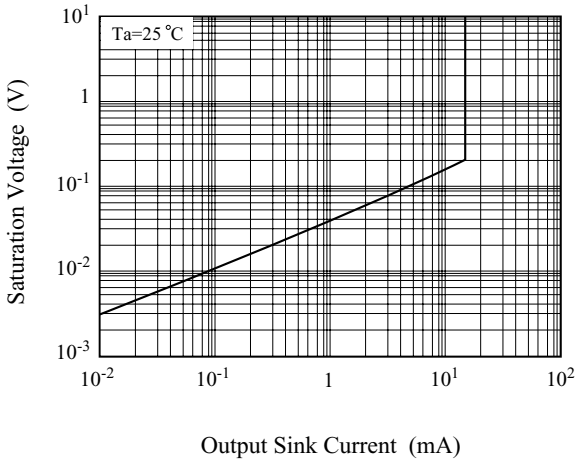


Fig. 4 Reponse Time for Various Input Overdrive Negative Transition

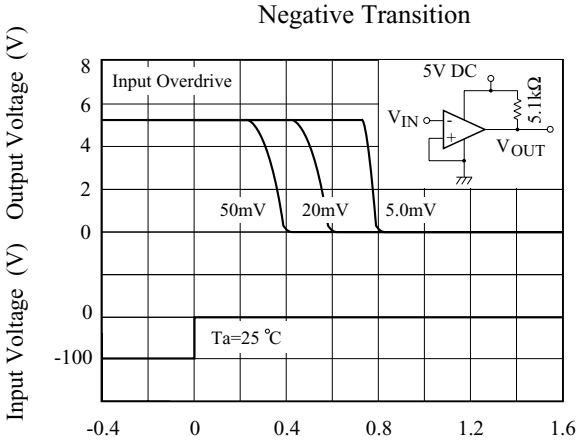


Fig. 5 Reponse Time for Various Input Overdrive Positive Transition