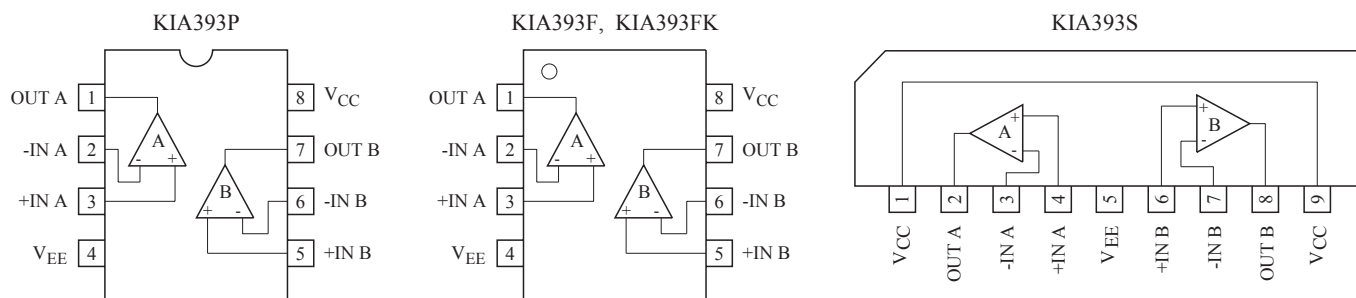


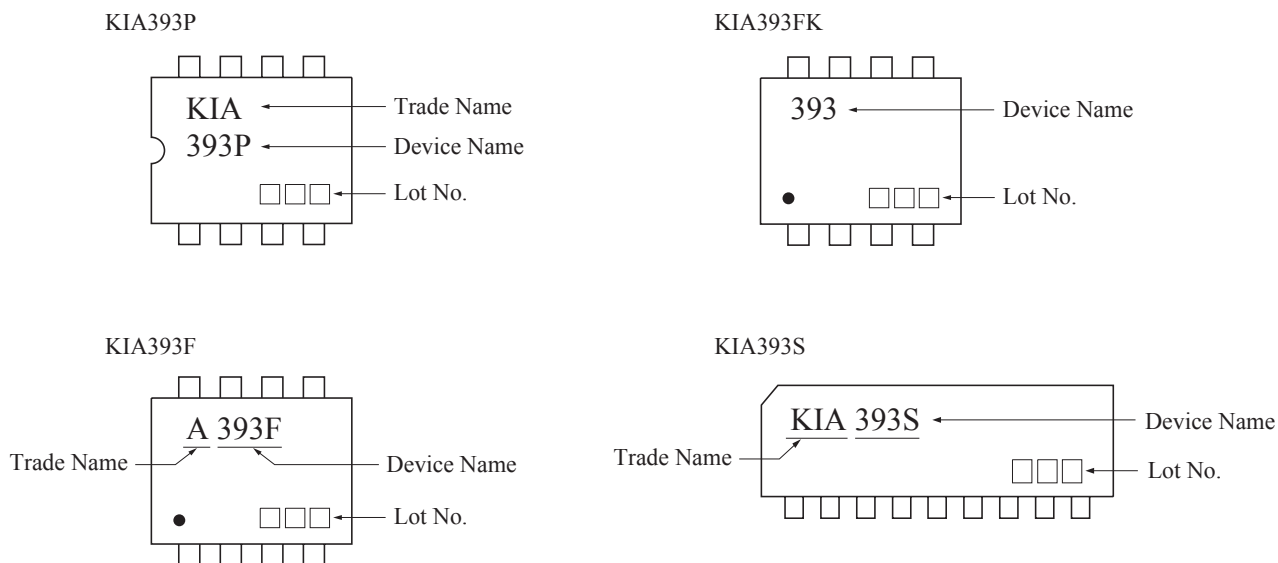
DUAL COMPARATOR

- 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.
- Output is Open Collector and Wired-OR Possible.
- Possible to exchange the position of Pin⑨ for Pin① because of Pin connection being symmetric. (KIA393S only)
- The Pin① and Pin⑨ of Lead frame was each other connected. (KIA393S Only)

PIN CONNECTION (TOP VIEW)

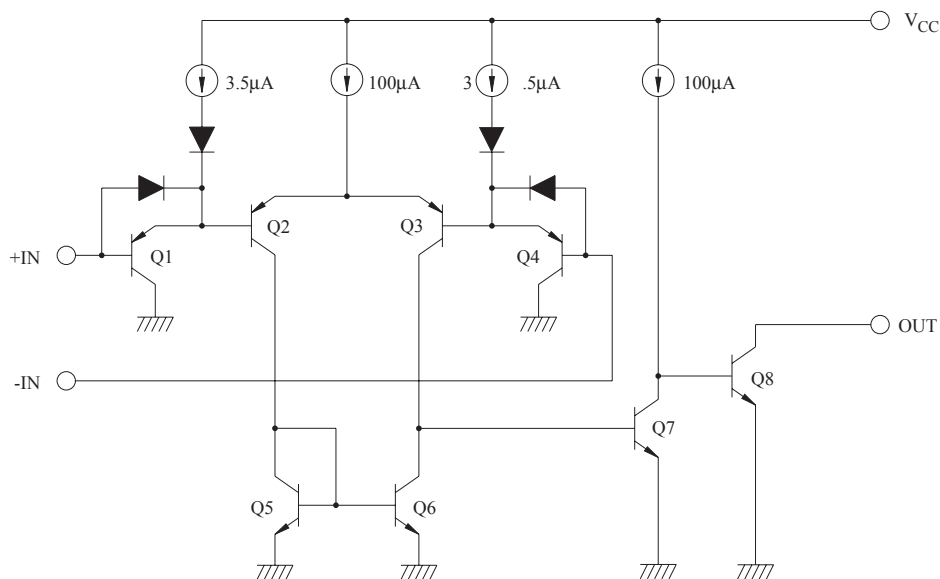


MARKING



KIA393P/S/F/FK

EQUIVALENT CIRCUIT



MAXIMUM RATINGS (Ta=25℃)

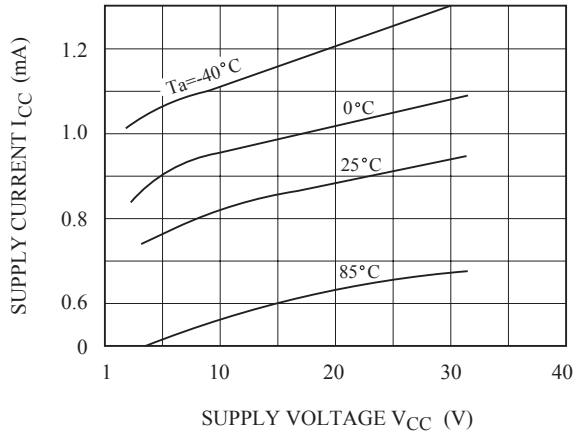
CHARACTERISTIC		SYMBOL	RATING	UNIT
Supply Voltage		V_{CC}	$\pm 18, 36$	V
Differential Input Voltage		DV_{IN}	$\pm 18, 36$	V
Common Mode Input Voltage		CMV_{IN}	$-0.3 \sim V_{CC}$	V
Power Dissipation	KIA393P/S	P_D	500	mW
	KIA393F		240	
	KIA393FK		200	
Operating Temperature		T_{opr}	$-40 \sim 85$	℃
Storage Temperature		T_{stg}	$-55 \sim 125$	℃
Pin① to Pin⑨ Maximum Current	KIA393S	I_{max}	1	A

ELECTRICAL CHARACTERISTICS ($V_{CC}=5V$, $V_{EE}=GND$, $T_a=25^\circ C$)

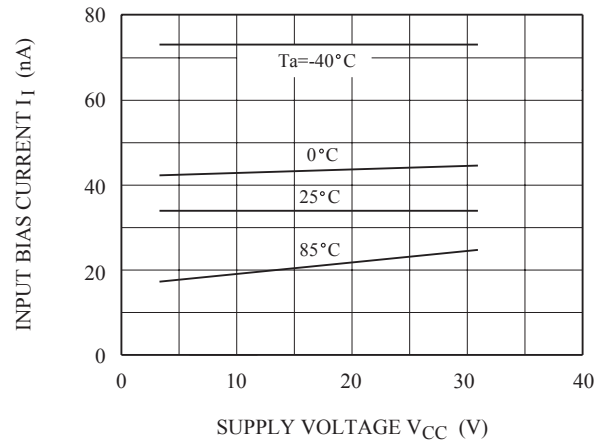
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Input Offset Voltage	V_{IO}	$V_O=1.4V$	-	2	5	mV
Input Offset Current	I_{IO}	-	-	5	50	nA
Input Bias Current	I_I	-	-	25	250	nA
Common Mode Input Voltage	CMV_{IN}	-	0	-	$V_{CC}-1.5$	V
Voltage Gain	G_V	$R_L=15k\Omega$	-	200	-	V/mV
Supply Current	I_{CC}	No load	-	0.8	2	mA
Sink Current	I_{sink}	$+IN=0V, -IN=1V, V_{OL}=1.5V$	6	16	-	mA
Output Voltage ("L" Level)	V_{OL}	$+IN=0V, -IN=1V, I_{sink}=3mA$	-	0.2	0.4	V
Output Leak Current	I_{LEAK}	$+IN=1V, -IN=0V, V_O=5V$	-	0.1	-	nA
Response Time	t_{rsp}	$R_L=5.1k\Omega, C_L=15pF$	-	1.3	-	μs

KIA393P/S/F/FK

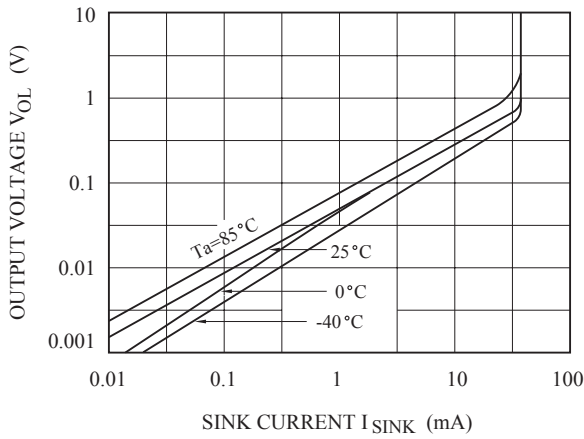
$V_{CC} - I_{CC}$



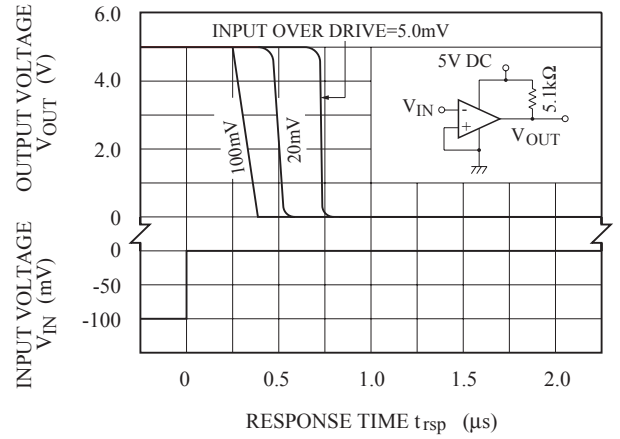
$V_{CC} - I_I$



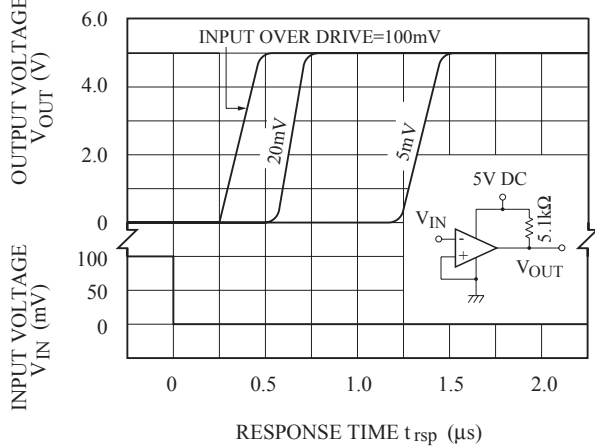
$V_{OL} - I_{SINK}$



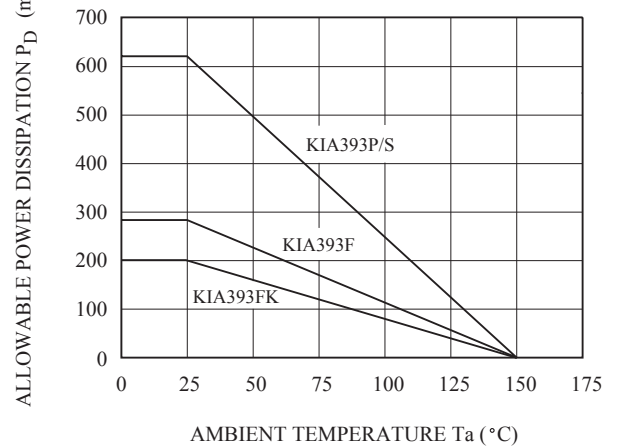
$V_{IN}, V_{OUT} - t_{rsp}$



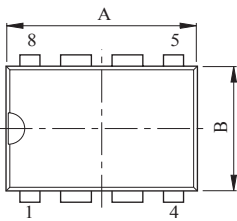
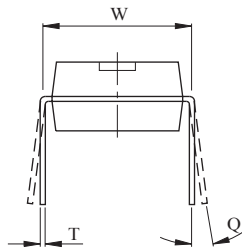
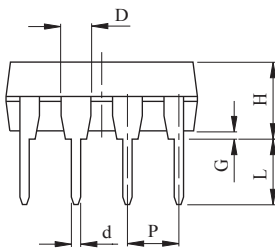
$V_{IN}, V_{OUT} - t_{rsp}$



$P_D - T_a$

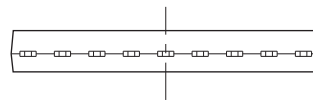
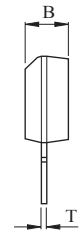
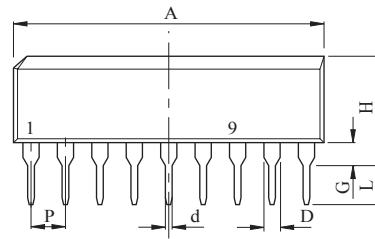


KIA393P/S/F/FK



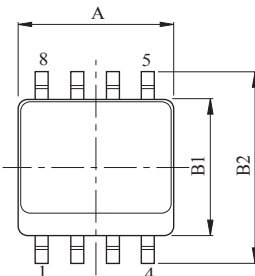
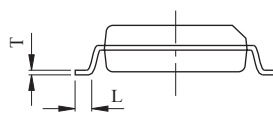
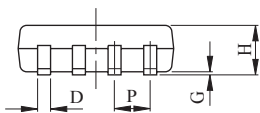
DIM	MILLIMETERS
A	9.6±0.2
B	6.45±0.2
D	1.52±0.1
d	0.46±0.1
G	0.50 MIN
H	3.8±0.3
L	3.3±0.3
P	2.54
T	0.25+0.1/-0.05
W	7.62
Q	0 - 15°

DIP-8



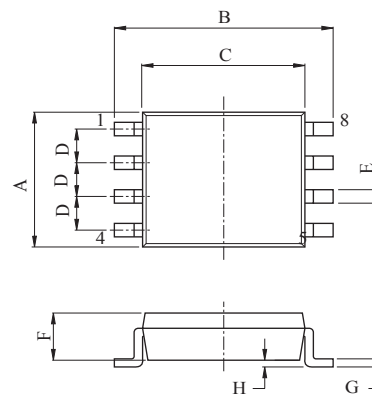
DIM	MILLIMETERS
A	22.48±0.2
B	3.2±0.2
D	1.2±0.25
d	0.5±0.1
G	1.95±0.2
H	7.7±0.3
L	3.2±0.3
P	2.54
T	0.25+0.1/-0.05

SIP-9



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



DIM	MILLIMETERS
A	2.0±0.1
B	3.1±0.1
C	2.3±0.1
D	0.5
E	0.2+0.05/-0.04
F	0.7±0.1
G	0.12±0.04
H	0 ~ 0.1

US8