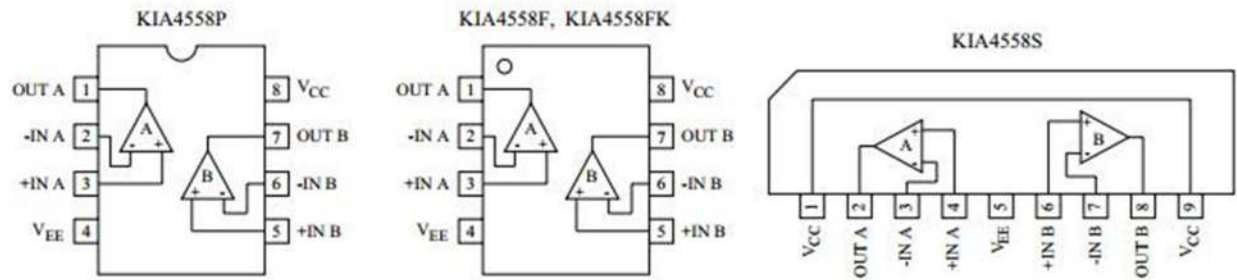


KIA4558

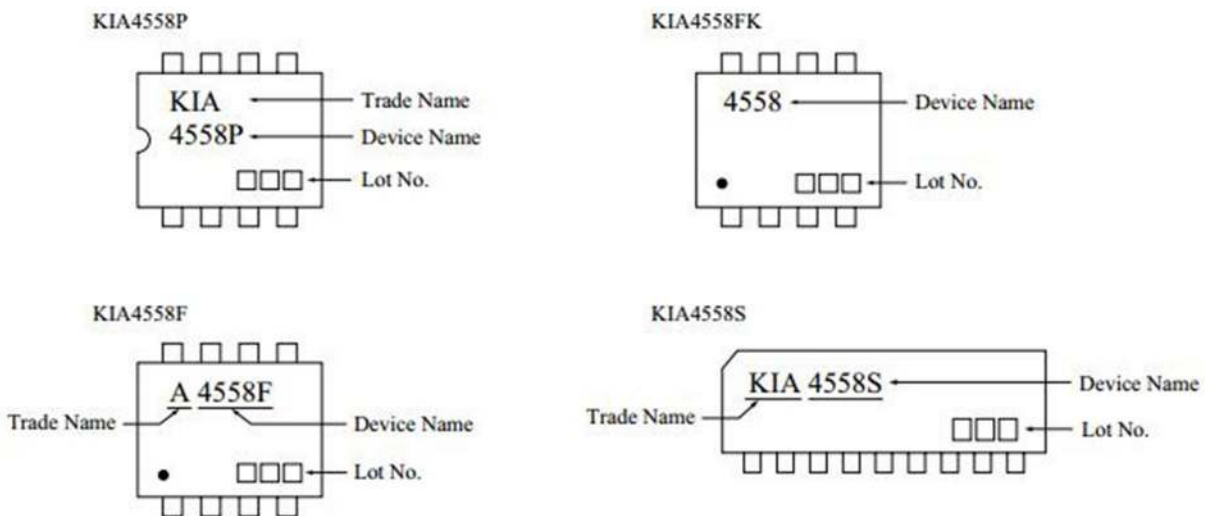
DUAL LOW NOISE OPERATIONAL AMPLIFIER

- Internal Frequency Compensation Type.
- Possible to Exchange the Position of Pin ⑨ for Pin ① Because of Pin Connection Being Symmetric. (KIA4558S Device Only).
- Pin ① and Pin ⑨ of lead frame was each other connected. (KIA4558S Only).
- Wide Band Range : $f_T=3\text{MHz}$ (Typ.)
- Suitable Application for Active Filter and Equalizer Amplifier.

PIN CONNECTION (TOP VIEW)



MARKING

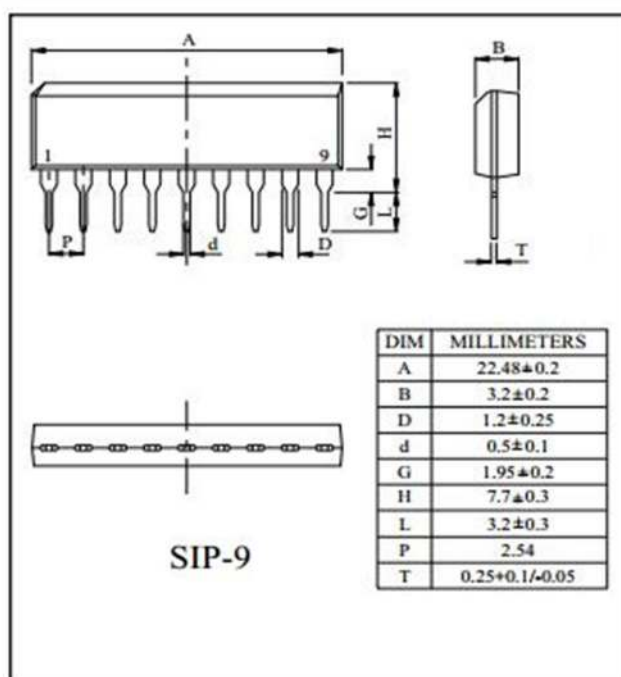


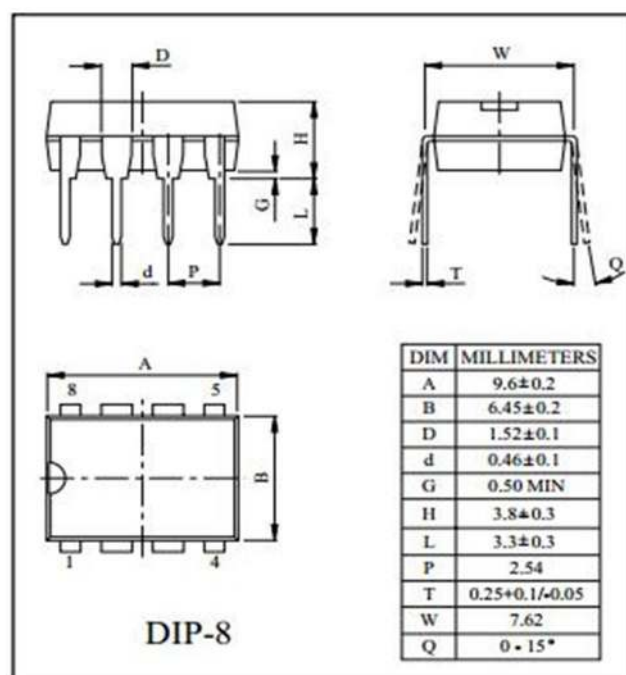
MAXIMUM RATINGS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V _{CC} V _{EE}	36,+18 or 0,-18	V
Differential Voltage	D _{VIN}	±30	V
Input Voltage	V _{IN}	V _{CC} ~ V _{EE}	V
Power Dissipation	P _D	KIA4558P/S	500
		KIA4558F	240
		KIA4558FK	200
Operating Temperature	T _{opr}	-40 ~ 85	°C
Storage Temperature	T _{stg}	-55 ~ 125	°C
Pin ① to Pin ⑨ Maximum Current	I _{max}	1	A

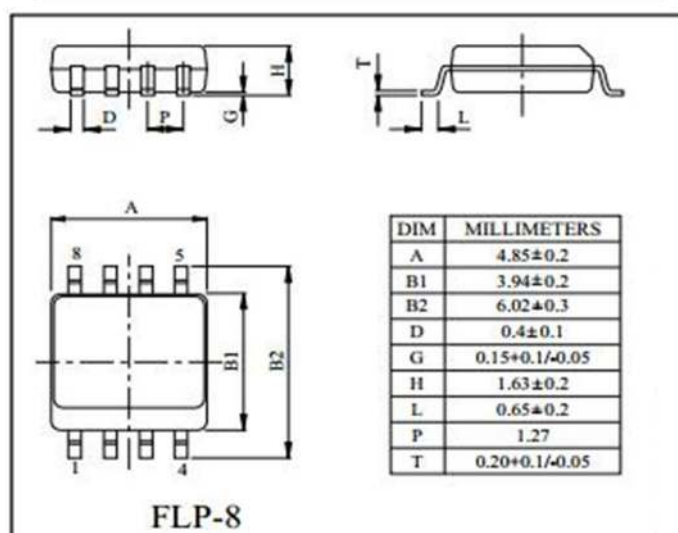
ELECTRICAL CHARACTERISTICS ($V_{CC}=15V$, $V_{EE}=-15V$, $T_a=25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Input Offset Voltage	V_{IO}	-	$R_g \leq 10k \Omega$	-	0.5	6	mV
Input Offset Current	I_{IO}	-	-	-	5	200	nA
Input Bias Current	I_I	-	-	-	60	500	nA
Common Mode Input Voltage	CMV_{IN}	-	-	± 12	± 14	-	V
Maximum Output Voltage	V_{OM}	-	$R_L = 10k \Omega$	± 12	± 14	-	V
	V_{OMR}		$R_L = 2k \Omega$	± 10	± 13	-	
Source Current	I_{source}	-	-	27	-	-	mA
Sink Current	I_{sink}	-	-	27	-	-	mA
Voltage Gain (Open Loop)	G_V	-	$V_{OUT} = \pm 10V$, $R_L = 2k \Omega$	86	100	-	dB
Common Mode Input Signal Rejection Ratio	CMRR	-	$R_g \leq 10k \Omega$	70	90	-	dB
Supply Voltage Rejection Ratio	SVRR	-	$R_g \leq 10k \Omega$	-	30	150	$\mu V/V$
Slew Rate	SR	-	$G_V = 1$, $R_L = 2k \Omega$	-	1.0	-	V/ μs
Unity Gain Cross Frequency	f_T	-	Open Loop	-	3.0	-	MHz
Supply Current	I_{CC} , I_{EE}	-	-	-	4.0	6.0	mA
Equivalent Input Noise Voltage	V_{NI}	-	$R_S = 1k \Omega$, $f = 30Hz \sim 30kHz$	-	2.5	-	μV_{rms}

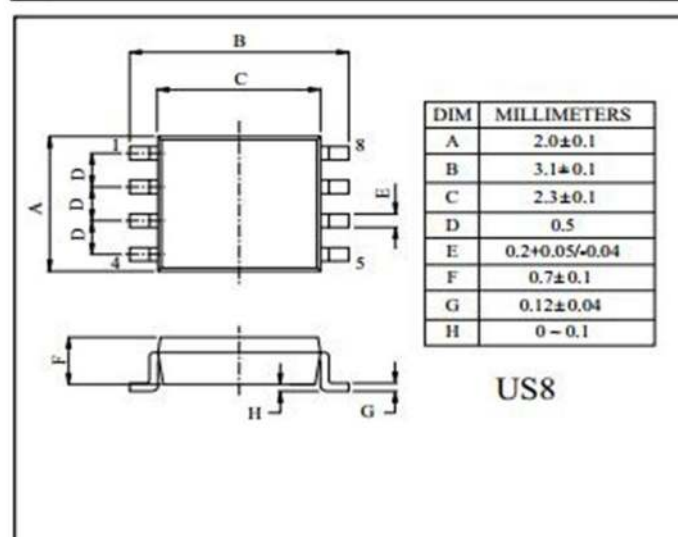




DIP-8



FLP-8



US8