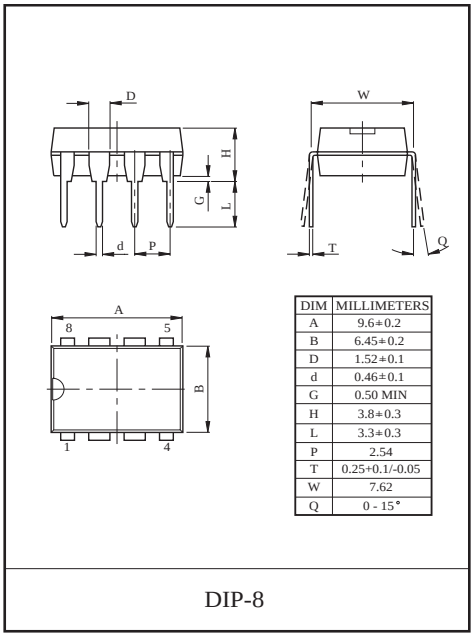
DUAL LOW NOISE OPERATIONAL AMPLIFIER

· Internal Frequency Compensation Type.
Wide Band Range : f_T=3MHz (Typ.)
Suitable Application for Active Filter and Equalizer Amplifier.

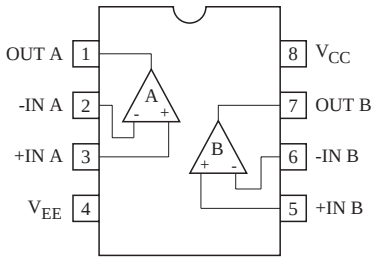


DIM	MILLIMETERS
A	9.6±0.2
B	6.45±0.2
D	1.52±0.1
d	0.46±0.1
G	0.50 MIN
H	3.8±0.3
L	3.3±0.3
P	2.54
T	0.25+0.1/-0.05
W	7.62
Q	0 - 15°

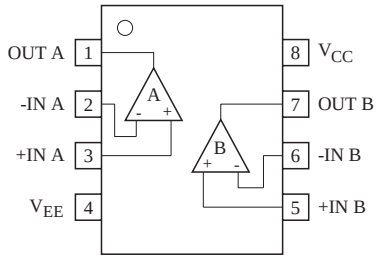
DIP-8

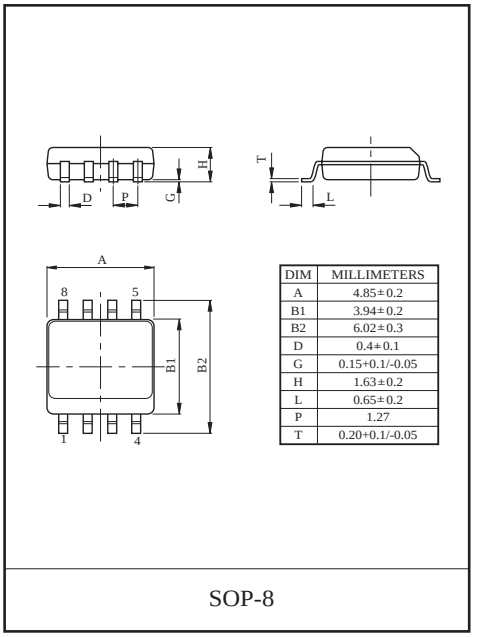
PIN CONNECTION (TOP VIEW)

FA4558P



FA4558F





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

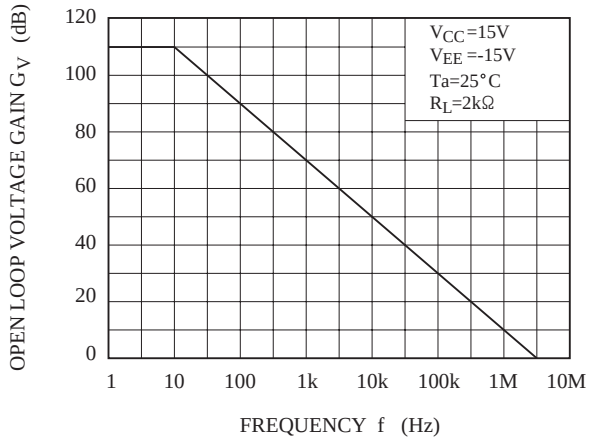
MAXIMUM RATINGS (Ta=25℃)

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	FA4558P	P_D	500	mW
	FA4558F		240	
Operating Temperature		T_{opr}	-40 ~ 85	℃
Storage Temperature		T_{stg}	-55 ~ 125	℃
Pin ① to Pin ⑨ Maximum Current	FA4558S	I_{max}	1	A

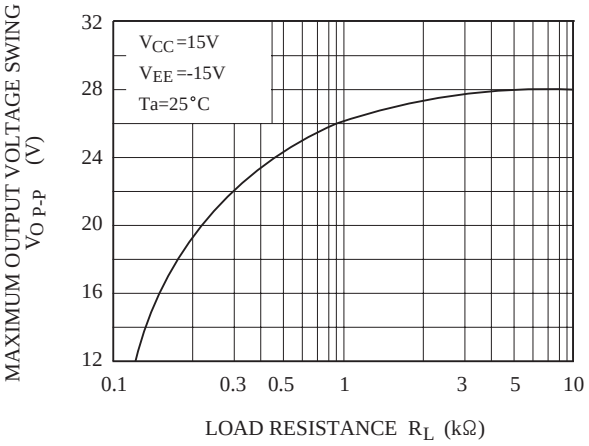
ELECTRICAL CHARACTERISTICS (V_{CC}=15V, V_{EE}=-15V, Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Input Offset Voltage	V_{IO}	-	Rg ≤10k	-	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=10kΩ	±12	±14	-	V
	V_{OMR}		R_L=2kΩ	±10	±13	-	
Source Current	I_{source}	-	-	15	-	-	mA
Sink Current	I_{sink}	-	-	35	-	-	mA
Voltage Gain (Open Loop)	G_V	-	V_{OUT}= ±10V, R_L=2k	86	100	-	dB
Common Mode Input Signal Rejection Ratio	CMRR	-	Rg ≤ 10kΩ	70	90	-	dB
Supply Voltage Rejection Ratio	SVRR	-	Rg ≤10kΩ	-	30	150	μV/V
Slew Rate	SR	-	G_V=1, R_L=2kΩ	-	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=1kΩ, f=30Hz ~ 30kHz	-	2.5	-	μV_{rms}

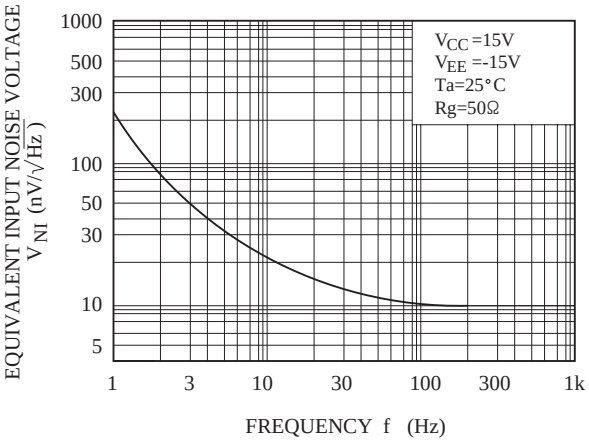
G_V - f



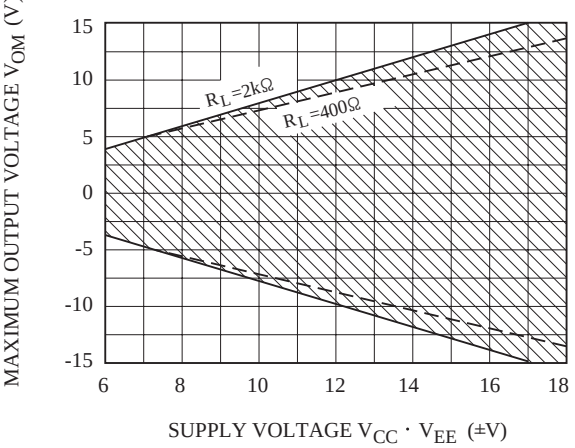
$V_{O\,P\text{-}P}$ - R_L



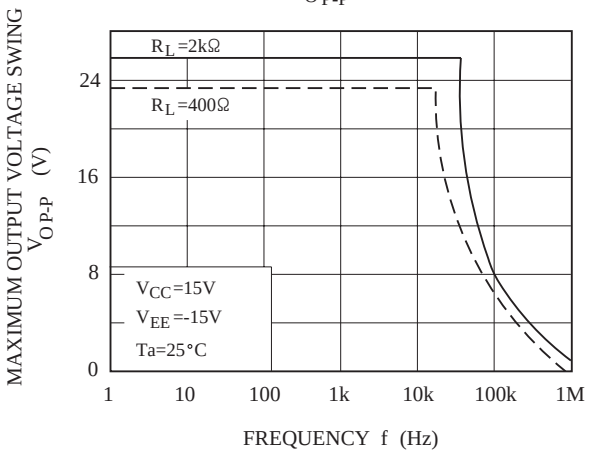
V_{NI} - f



V_{OM} - V_{CC} ,V_{EE}



$V_{O\,P\text{-}P}$ - f



I_I - Ta