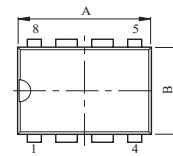
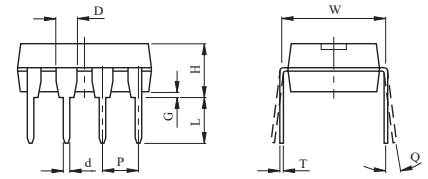
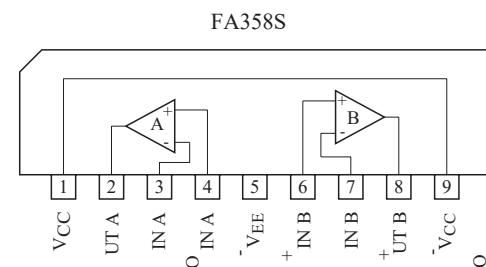
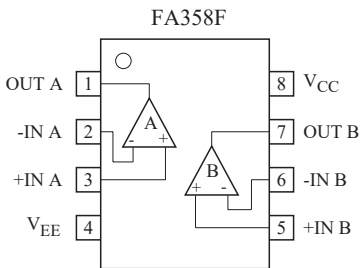
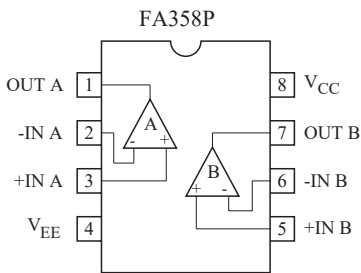


### DUAL OPERATIONAL AMPLIFIER

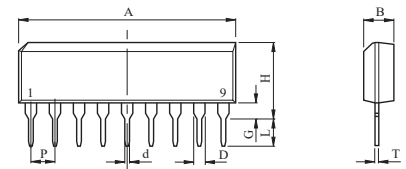
- In the Linear Mode the Input Common Mode Voltage Range Includes Ground.
- Two Internally Compensated OP Amps are in Single Package.
- Low Power Dissipation and Power Drain Suitable for Battery Operation.
- Differential Input Voltage Range Equal to the Power Supply Voltage.
- Wide Power Supply Voltage Range and Signal Power Supply  
: Single Supply  $3V_{DC}$  to  $36V_{DC}$  Dual Supplies  $\pm 1.5V_{DC}$  to  $\pm 18V_{DC}$
- Large Output Voltage Swing :  $0V_{DC}$  to  $V_{CC}-1.5V_{DC}$
- Low Input Biasing Current :  $I_I=45nA_{DC}$  (Typ.)
- Possible to Exchange the Position of Pin⑨ for Pin①  
Because of Pin Connection Being Symmetric. (FA358S only)
- The Pin① and Pin⑨ of Lead Frame was Each Other Connected. (FA358S Only)

### PIN CONNECTION (TOP VIEW)



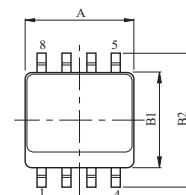
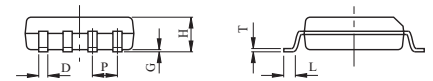
DIM	MILLIMETERS
A	9.6±0.2
B	6.45±0.2
D	1.52±0.1
d	0.46±0.1
G	0.50 MIN
H	3.8±0.3
L	3.3±0.3
P	2.54
T	0.25+0.1/-0.05
W	7.62
Q	0-15*

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

SOP-8



# FA358P/S/F

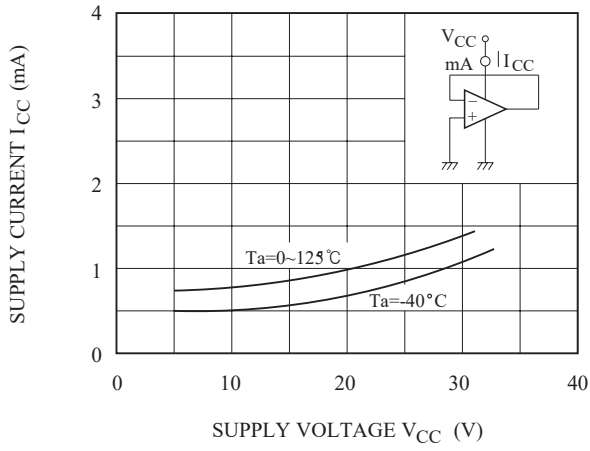
## MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Supply Voltage		$V_{CC}$	36, ±18	V
Differential Input Voltage		$DV_{IN}$	±36	V
Input Voltage		$V_{IN}$	-0.3 ~ 36	V
Power Dissipation	FA358P/S	$P_D$	500	mW
	FA358F		280	
	FA358FK		200	
Operating Temperature		$T_{opr}$	-40 ~ 125	°C
Storage Temperature		$T_{stg}$	-55 ~ 125	°C
Pin① to Pin⑨ Maximum Current	FA358S	$I_{max}$	1	A

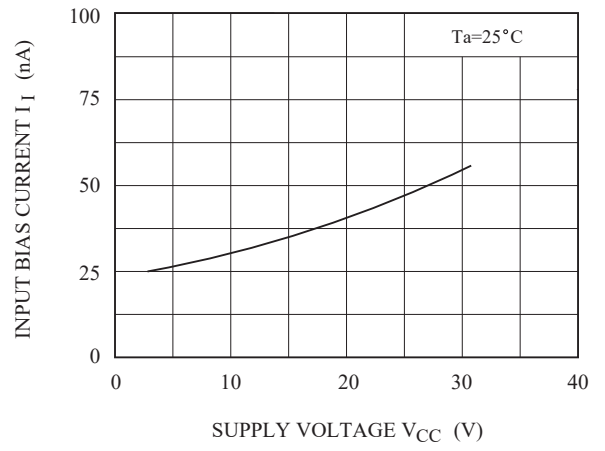
## ELECTRICAL CHARACTERISTICS (V<sub>CC</sub>=5V, V<sub>EE</sub>=GND, Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Input Offset Voltage	$V_{IO}$	$R_g \leq 10k\Omega$	-	-	5	mV
Input Offset Current	$I_{IO}$	-	-	-	50	nA
Input Bias Current	$I_I$	-	-	45	210	nA
Common Mode Input Voltage	$CMV_{IN}$	$V_{CC}=30V, V_{EE}=GND$	0	-	28	V
Supply Current	$I_{CC}, I_{EE}$	$R_L = \infty, \text{ All OP Amps}$	-	0.7	1.2	mA
Voltage Gain	$G_V$	$R_L \leq 2k\Omega$	86	-	-	dB
Maximum Output Voltage Swing	$V_{OP-P}$	$R_L=2k\Omega, V_{CC}=30V$	26	-	-	V
Common Mode Input Signal Rejection Ratio	CMRR	$V_{CC}=30V, R_S=10k\Omega$	65	-	-	dB
Supply Voltage Rejection Ratio	SVRR	$R_g=10k\Omega, V_{CC}=30V$	65	-	-	dB
Source Current	$I_{source}$	-IN=0V <sub>DC</sub> , +IN=1V <sub>DC</sub>	10	-	-	mA
Sink Current	$I_{sink}$	-IN=1V <sub>DC</sub> , +IN=0V <sub>DC</sub>	10	-	-	mA

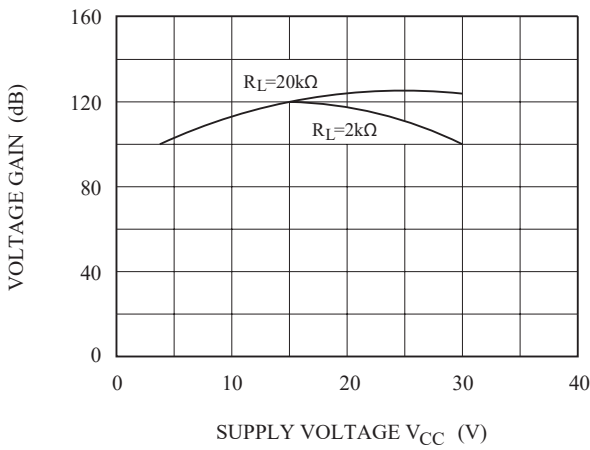
$V_{CC} - I_{CC}$



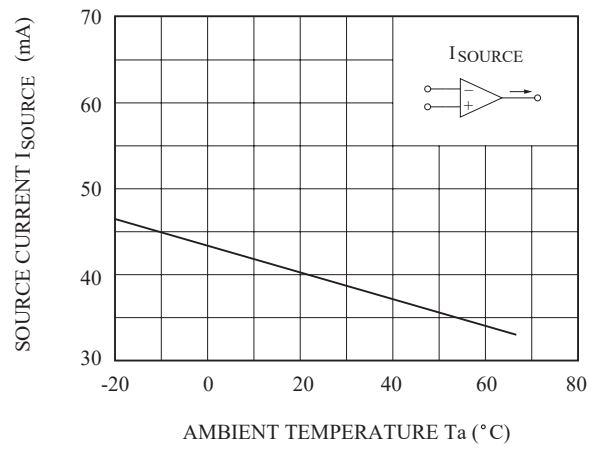
$V_{CC} - I_I$



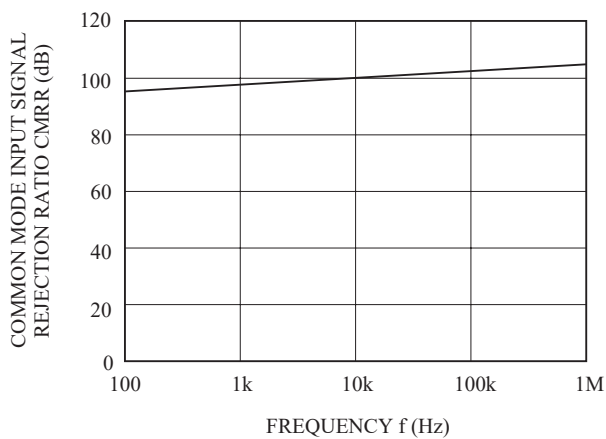
$V_{CC} - G_V$



$I_{SOURCE} - T_a$



CMRR - f



$G_V - f$

