TOSHIBA TA75062P/S/F

TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MONOLITHIC

TA75062P, TA75062S, TA75062F

DUAL OPERATIONAL AMPLIFIER

The TA75062P, TA75062S and TA75062F are J-FET input low-power operational amplifiers with low input bias and offset current and fast slew rate.

The TA75062P is pin compatible with the TA75458P and 1458. The TA75062S is single-in-line package.

It is possible to exchange the position of 9 pin for 1 pin because of pin connection being symmetric.

The TA75062F is mini-flat package.

The TA75062P series are excellent choice for active filters, integrators, buffers and sample-and-hold circuits.

FEATURES

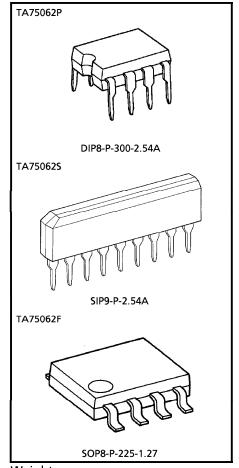
 Low Supply Current : 500 μA MAX. 400pA MAX. Low Input Bias Current Low Input Offset Current 200pA MAX.

High Slew Rate : $3.5V/\mu s$

Wide Supply Voltage Range : ±2~±18V

Internal Frequency Compensation

Output Short Circuit Protection



Weight

DIP8-P-300-2.54 : 0.5g (Typ.) : 0.9g (Typ.) SIP9-P-2.54A

SOP8-P-225-1.27

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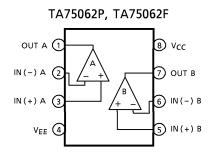
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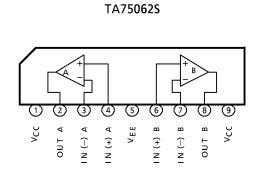
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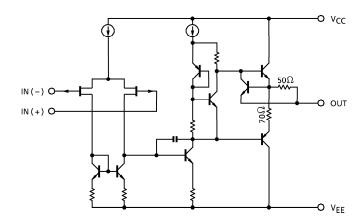
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PIN CONNECTION (TOP VIEW)





EQUIVALENT CIRCUIT



MAXIMUM RATINGS (Ta = 25°C)

<u> </u>							
CHARACTERISTIC		SYMBOL	RATING	UNIT			
Supply Voltage		Vcc	18	V			
		VEE	– 18	\ \ \			
Differential Input Voltage		DVIN	± 30	V			
Input Voltage		VIN	± 15	V			
Power Dissipation	TA75062P		500	mW			
	TA75062S	PD	500				
	TA75062F		240				
Operating Temperature		T _{opr}	- 40∼85	°C			
Storage Temperature		T _{stg}	- 55~125	°C			

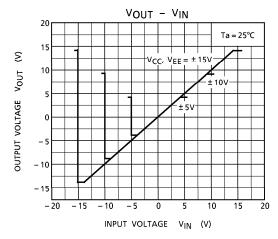
ELECTRICAL CHARACTERISTICS ($V_{CC} = 15V$, $V_{EE} = -15V$, $Ta = 25^{\circ}C$)

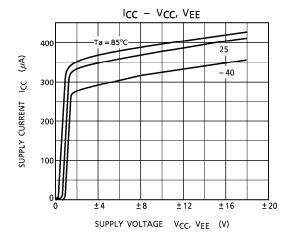
CHARACTERISTIC	SYMBOL	TEST CIR- CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Input Offset Voltage	V _{IO}	_	$R_g \le 10k\Omega$	_	3	15	mV
TC Of Input Offset Voltage	TCV _{IO}	_	_	_	10	_	μ V / °C
Input Offset Current	lo	_	_	_	5	200	pА
Input Bias Current	Ц	_	_	_	30	400	pА
Common Mode Input Voltage	CMV _{IN}	_	_	± 11.5	± 12	_	V
Maximum Output Voltage	Vом	_	$R_L = 10k\Omega$	20	27	_	V_{p-p}
Voltage Gain (Open Loop)	G_V	_	$V_{OUT} = \pm 10V$, $R_L = 10k\Omega$	3	6	_	V/mV
Unity Gain Cross Frequency	f _T	_	Open Loop, $R_L = 10k\Omega$	_	1	_	MHz
Input Resistance	R _{IN}	_	_	_	10 ¹²	_	Ω
Common Mode Input Signal Rejection Ratio	CMRR	_	$R_g \le 10 k\Omega$	70	76	_	dB
Supply Voltage Rejection Ratio	SVRR	_	$R_g \le 10 k\Omega$	70	76	_	dB
Supply Current	ICC, IEE	_	Non load	_	400	500	μ A
Cross Talk		_	_	_	- 120	_	dB

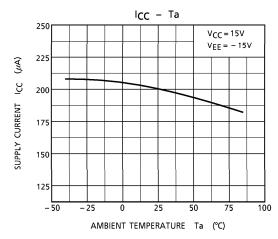
OPERATING CHARACTERISTICS ($V_{CC} = 15V$, $V_{EE} = -15V$, $Ta = 25^{\circ}C$)

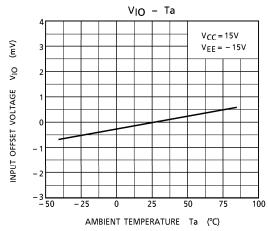
CHARACTERISTIC	SYMBOL	TEST CIR- CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Slew Rate	SR	_	$V_{IN} = 10V_{p-p}$, $R_L = 10k\Omega$ $C_L = 100pF$		3.5	_	V / μ s
Equivalent Input Noise Voltage	V _n	_	$R_S = 100\Omega$, $f = 1kHz$	_	42	_	nV /√Hz

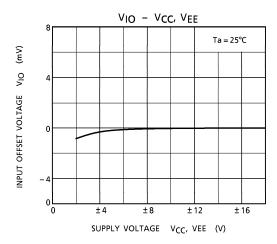
CHARACTERISTICS

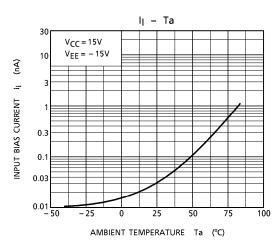


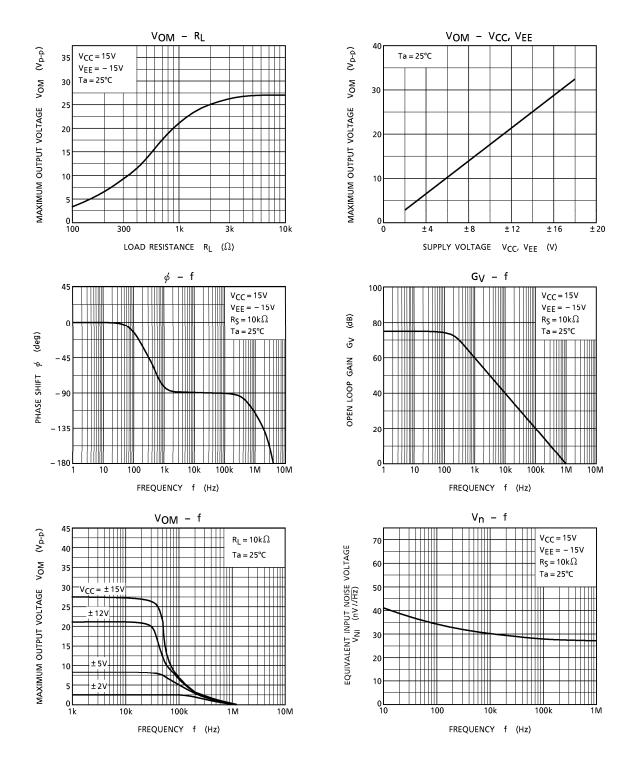


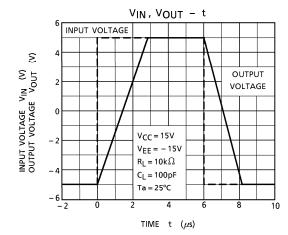










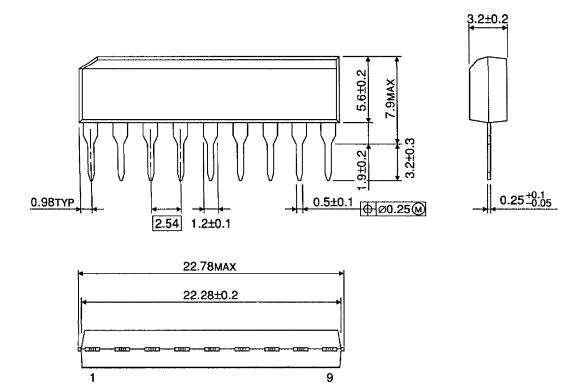


OUTLINE DRAWING DIP8-P-300-2.54A Unit: mm 6.4±0.2 7.62 10.1MAX 9.6±0.2 0.85±0.1 3.95±0.3 3.5±0. 3.5±0. 0.5±0.1 ⊕ 0.25 M 0.99TYP 2.54 1.2±0.1

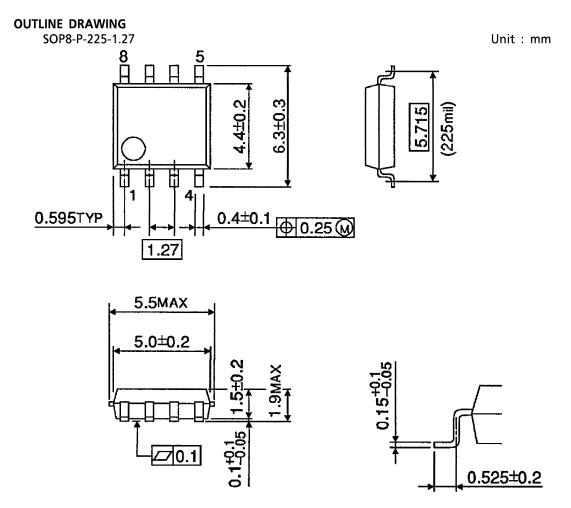
Weight: 0.5g (Typ.)

OUTLINE DRAWING SIP9-P-2.54A

Unit: mm



Weight: 0.9g (Typ.)



Weight: 0.1g (Typ.)