

TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MONOLITHIC

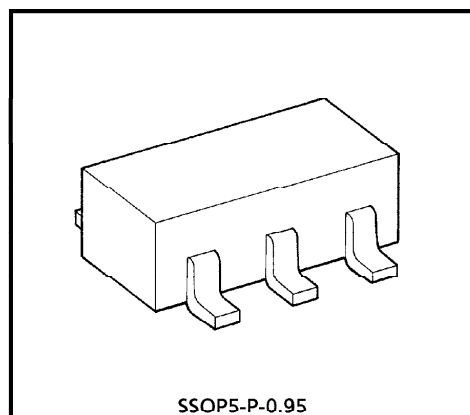
TA75S558F

DUAL OPERATIONAL AMPLIFIER

TA75S558F is a low-noise monolithic precision operational amplifier.

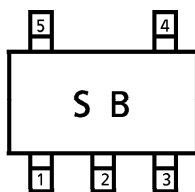
FEATURES

- Internal Frequency Compensation Type.
- Pin Compatible with TA75S01F.
- Wide Band Range : $f_T = 3\text{MHz}$ (Typ.)
- Noise Voltage Range : $V_{NI} = 2.5\mu\text{V}_{\text{rms}}$ (Typ.)
- Power Supply Range : $\pm 4V_{\text{DC}}$ to $\pm 18V_{\text{DC}}$
- Suitable Application for Active Filter Equalizer Amplifier and Headphone Amplifier.

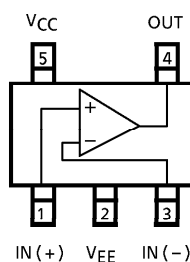


Weight : 0.014g (Typ.)

MARKING (TOP VIEW)



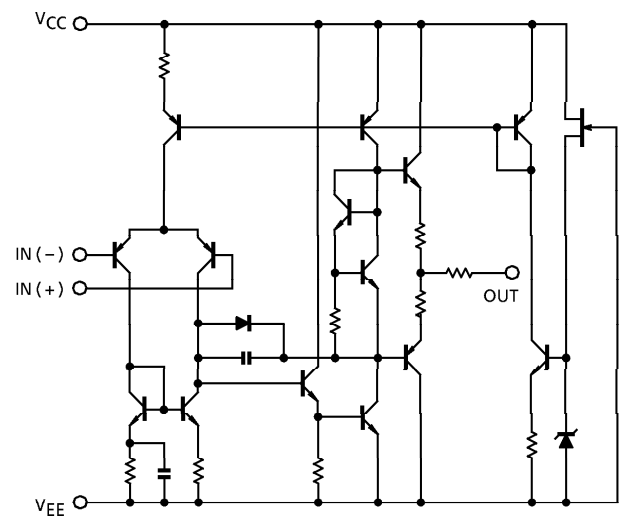
PIN CONNECTION (TOP VIEW)



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EQUIVALENT CIRCUIT

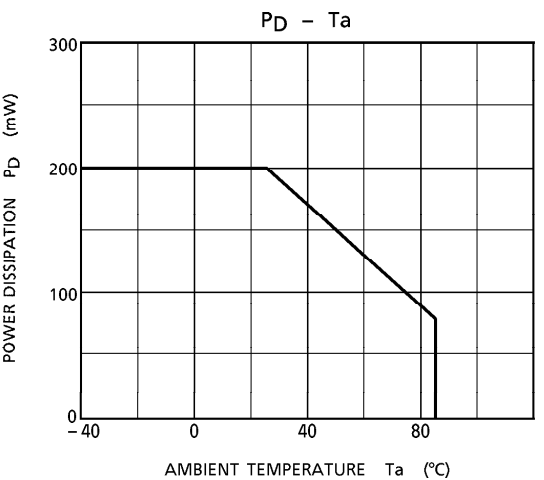
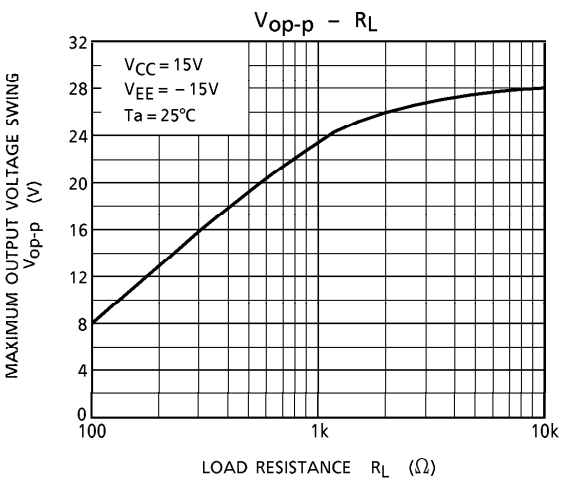
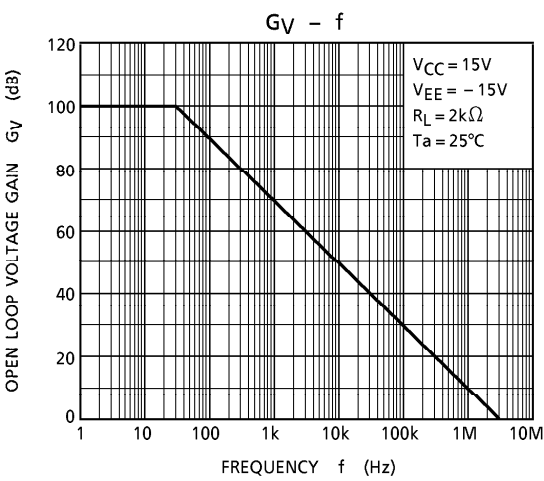
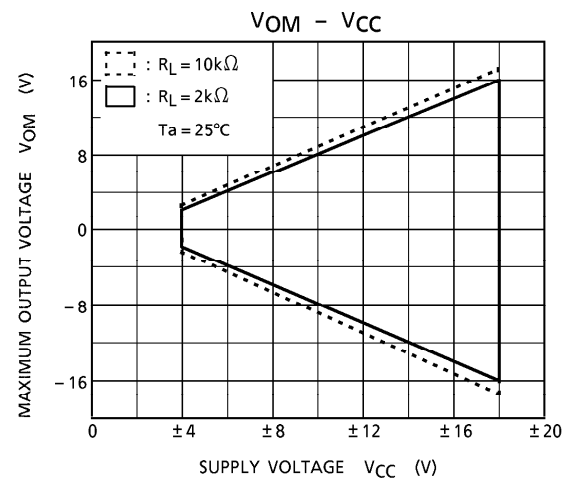


MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V_{CC}, V_{EE}	± 18	V
Differential Input Voltage	DV_{IN}	± 30	V
Input Voltage	V_{IN}	$V_{EE} \sim V_{CC}$	V
Power Dissipation	P_D	200	mW
Operating Temperature	T_{opr}	$-40 \sim 85$	°C
Storage Temperature	T_{stg}	$-55 \sim 125$	°C

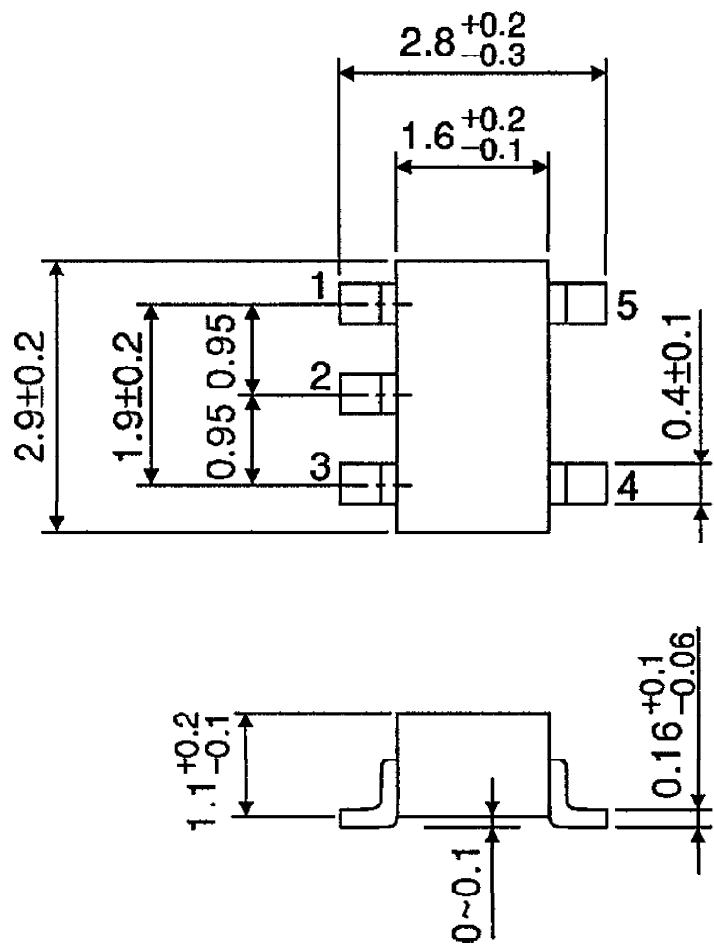
ELECTRICAL CHARACTERISTICS ($V_{CC} = 15V$, $V_{EE} = -15V$, $T_a = 25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	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}	—	—	—	40	—	mA
Sink Current	I_{sink}	—	—	—	40	—	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	—	$V / \mu s$
Unity Gain Cross Frequency	f_T	—	—	—	3.0	—	MHz
Supply Current	I_{CC}	—	—	—	2.5	4.0	mA
Equivalent Input Noise Voltage	V_{NI}	—	$R_s = 1k\Omega$, $f = 30Hz \sim 30kHz$	—	2.5	—	μV_{rms}



OUTLINE DRAWING
SSOP5-P-0.95

Unit : mm



Weight : 0.014g (Typ.)