

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.

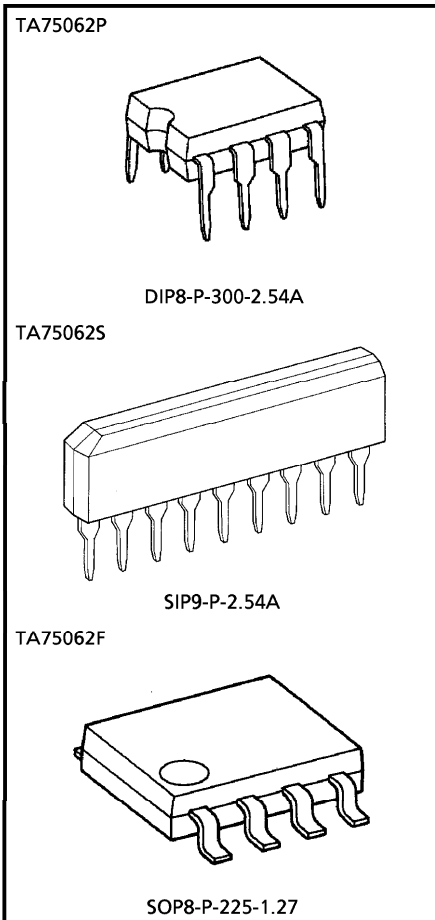
It is possible to exchange the position of 9 pin for 1 pin because of pin connection being symmetric.

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 $\mu$ A MAX.
- Low Input Bias Current : 400pA MAX.
- Low Input Offset Current : 200pA MAX.
- High Slew Rate : 3.5V /  $\mu$ s
- Wide Supply Voltage Range :  $\pm 2 \sim \pm 18$ V
- Internal Frequency Compensation
- Output Short Circuit Protection

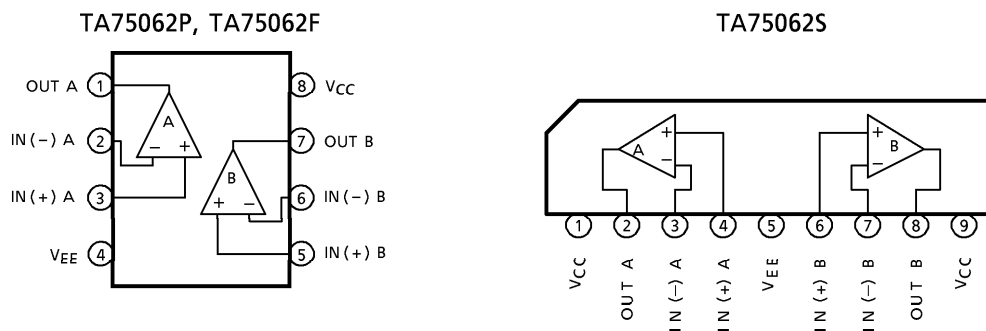


Weight	
DIP8-P-300-2.54	: 0.5g (Typ.)
SIP9-P-2.54A	: 0.9g (Typ.)
SOP8-P-225-1.27	: 0.1g (Typ.)

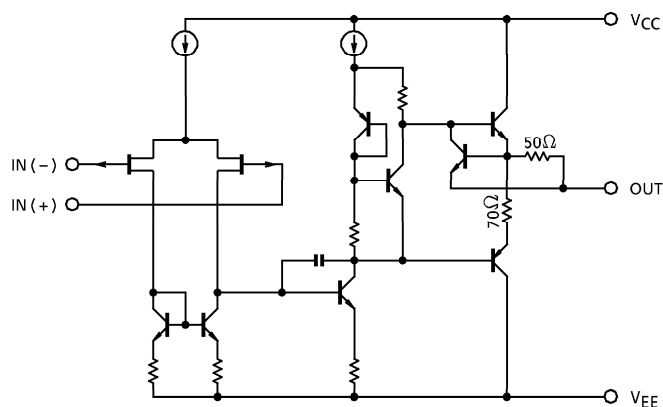
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PIN CONNECTION (TOP VIEW)



EQUIVALENT CIRCUIT



MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V <sub>CC</sub>	18	V
	V <sub>EE</sub>	- 18	
Differential Input Voltage	DV <sub>IN</sub>	± 30	V
Input Voltage	V <sub>IN</sub>	± 15	V
Power Dissipation	TA75062P	500	mW
	TA75062S		
	TA75062F	240	
Operating Temperature	T <sub>opr</sub>	- 40~85	°C
Storage Temperature	T <sub>stg</sub>	- 55~125	°C

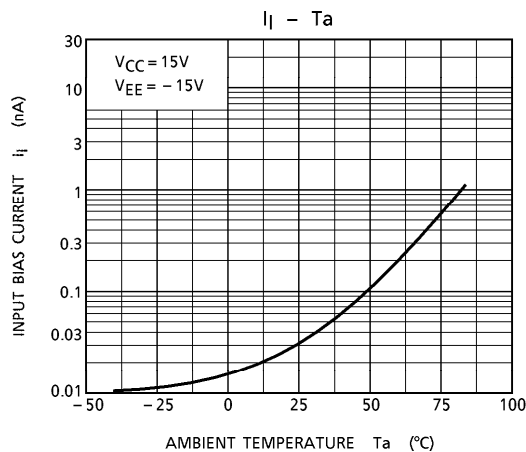
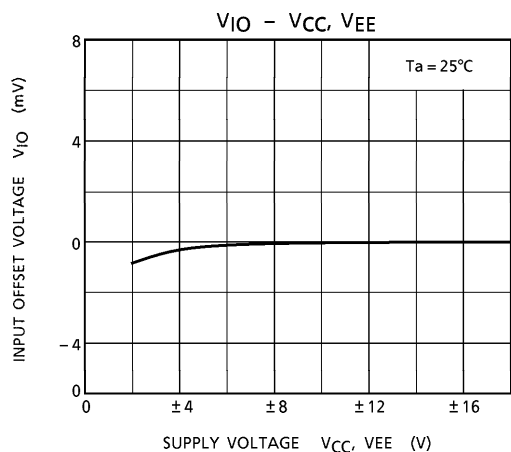
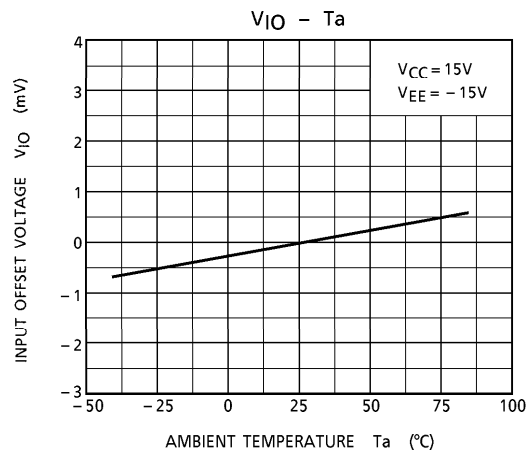
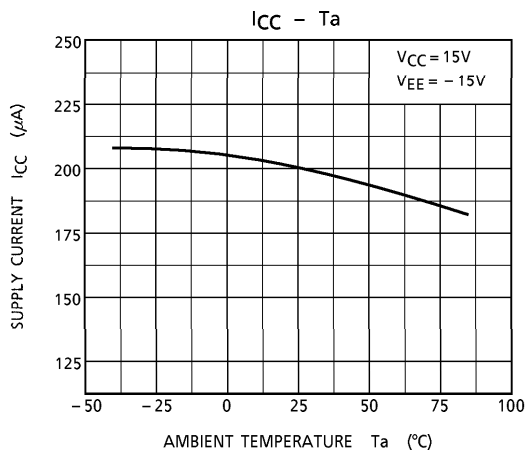
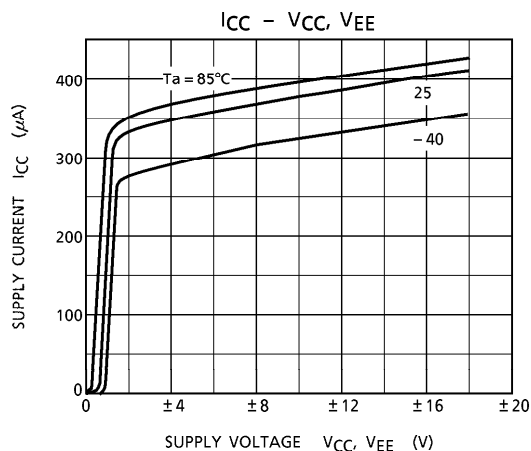
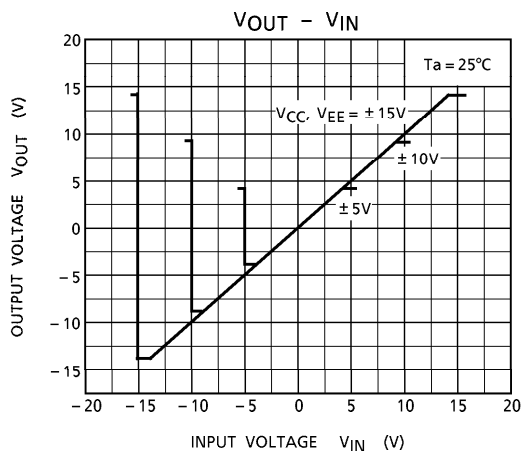
ELECTRICAL CHARACTERISTICS ( $V_{CC} = 15V$ ,  $V_{EE} = -15V$ ,  $T_a = 25^\circ C$ )

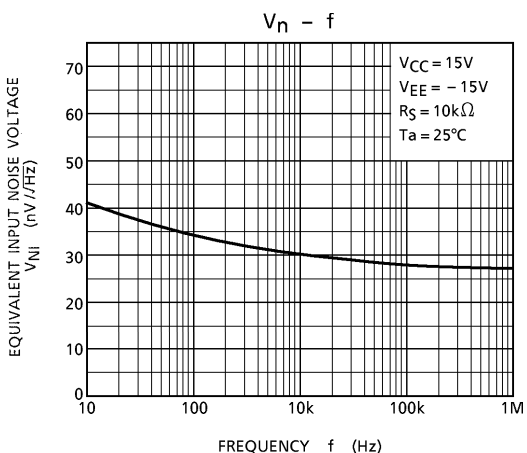
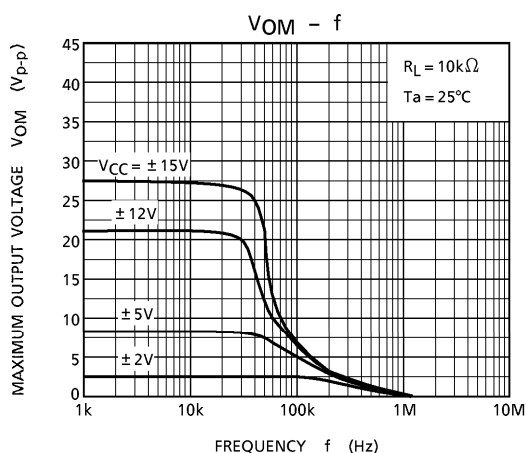
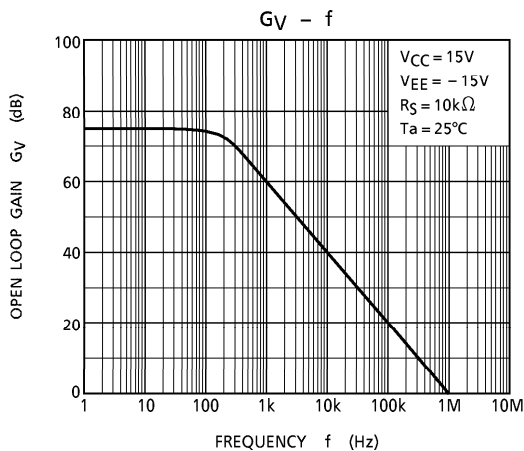
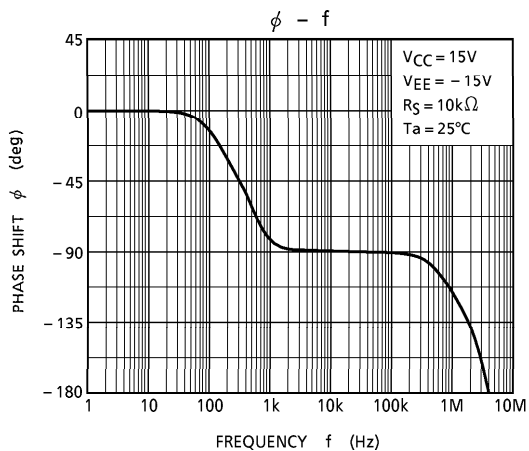
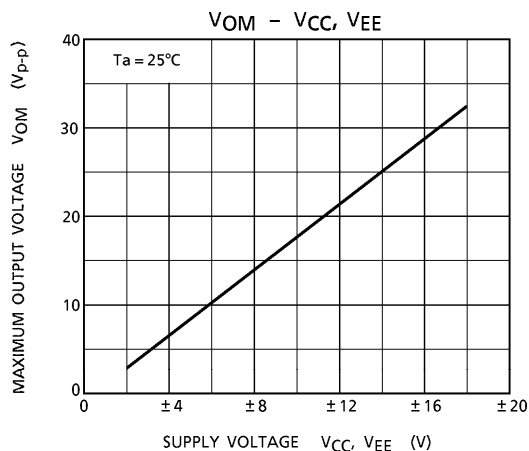
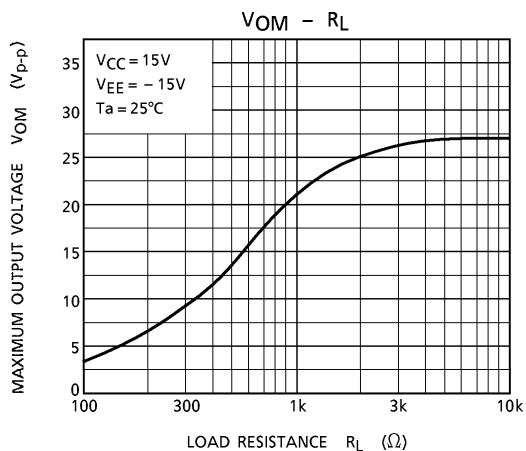
CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Input Offset Voltage	$V_{IO}$	—	$R_g \leq 10k\Omega$	—	3	15	mV
TC Of Input Offset Voltage	$TCV_{IO}$	—	—	—	10	—	$\mu V/^\circ C$
Input Offset Current	$I_{IO}$	—	—	—	5	200	pA
Input Bias Current	$I_I$	—	—	—	30	400	pA
Common Mode Input Voltage	$CMV_{IN}$	—	—	$\pm 11.5$	$\pm 12$	—	V
Maximum Output Voltage	$V_{OM}$	—	$R_L = 10k\Omega$	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	$R_{IN}$	—	—	—	$10^{12}$	—	$\Omega$
Common Mode Input Signal Rejection Ratio	CMRR	—	$R_g \leq 10k\Omega$	70	76	—	dB
Supply Voltage Rejection Ratio	SVRR	—	$R_g \leq 10k\Omega$	70	76	—	dB
Supply Current	$I_{CC}$ , $I_{EE}$	—	Non load	—	400	500	$\mu A$
Cross Talk		—	—	—	-120	—	dB

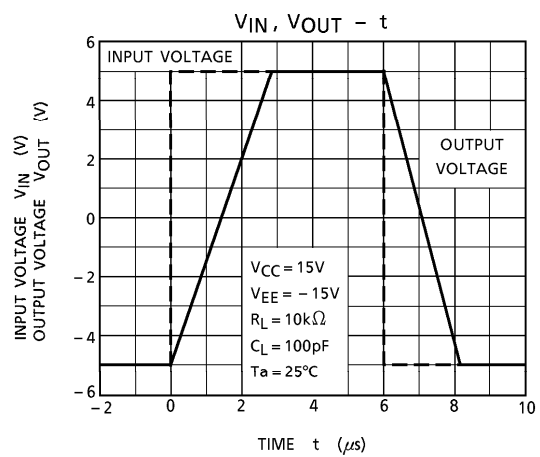
OPERATING CHARACTERISTICS ( $V_{CC} = 15V$ ,  $V_{EE} = -15V$ ,  $T_a = 25^\circ C$ )

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	—	$V/\mu s$
Equivalent Input Noise Voltage	$V_n$	—	$R_S = 100\Omega$ , $f = 1kHz$	—	42	—	$nV/\sqrt{Hz}$

CHARACTERISTICS

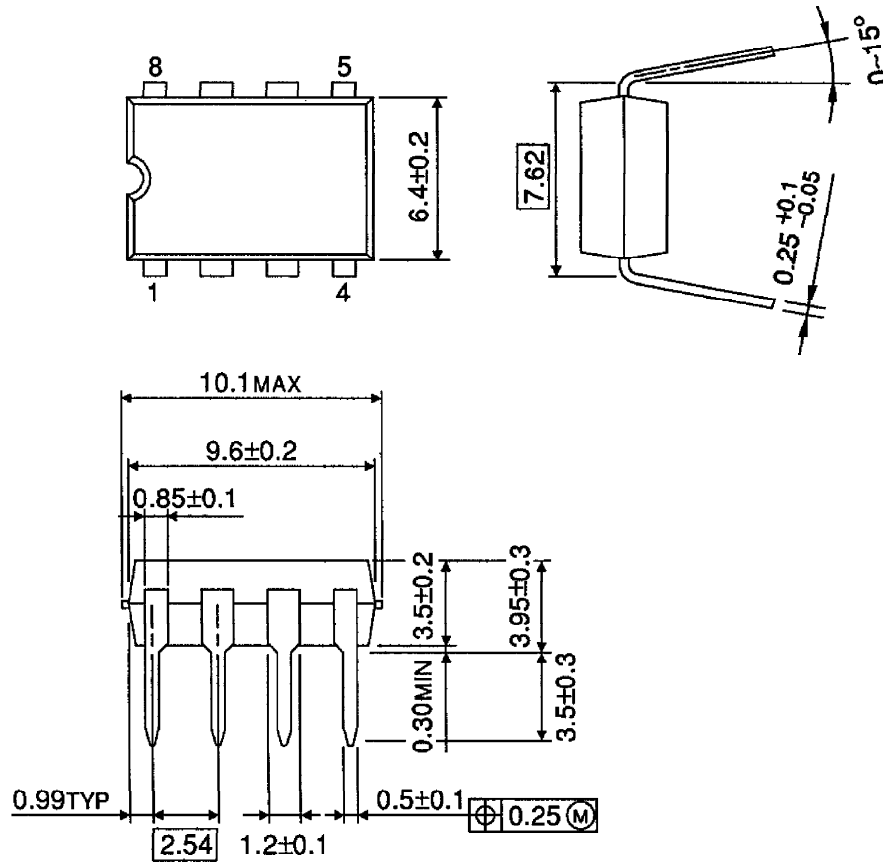






**OUTLINE DRAWING**  
DIP8-P-300-2.54A

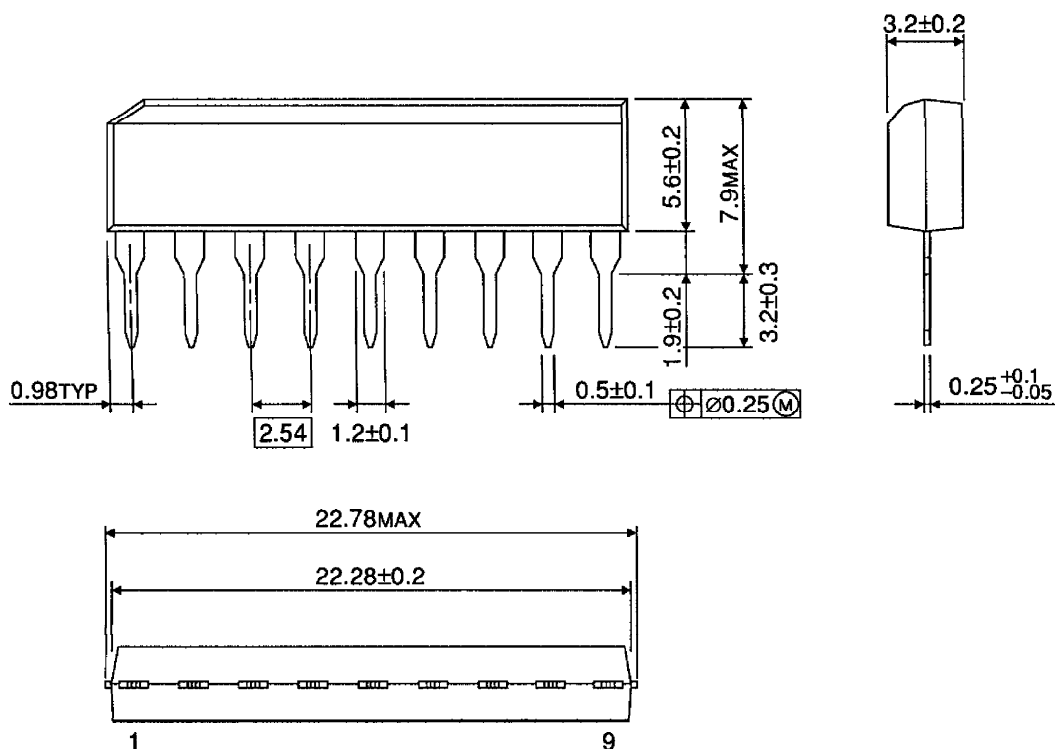
Unit : mm



Weight : 0.5g (Typ.)

**OUTLINE DRAWING**  
SIP9-P-2.54A

Unit : mm

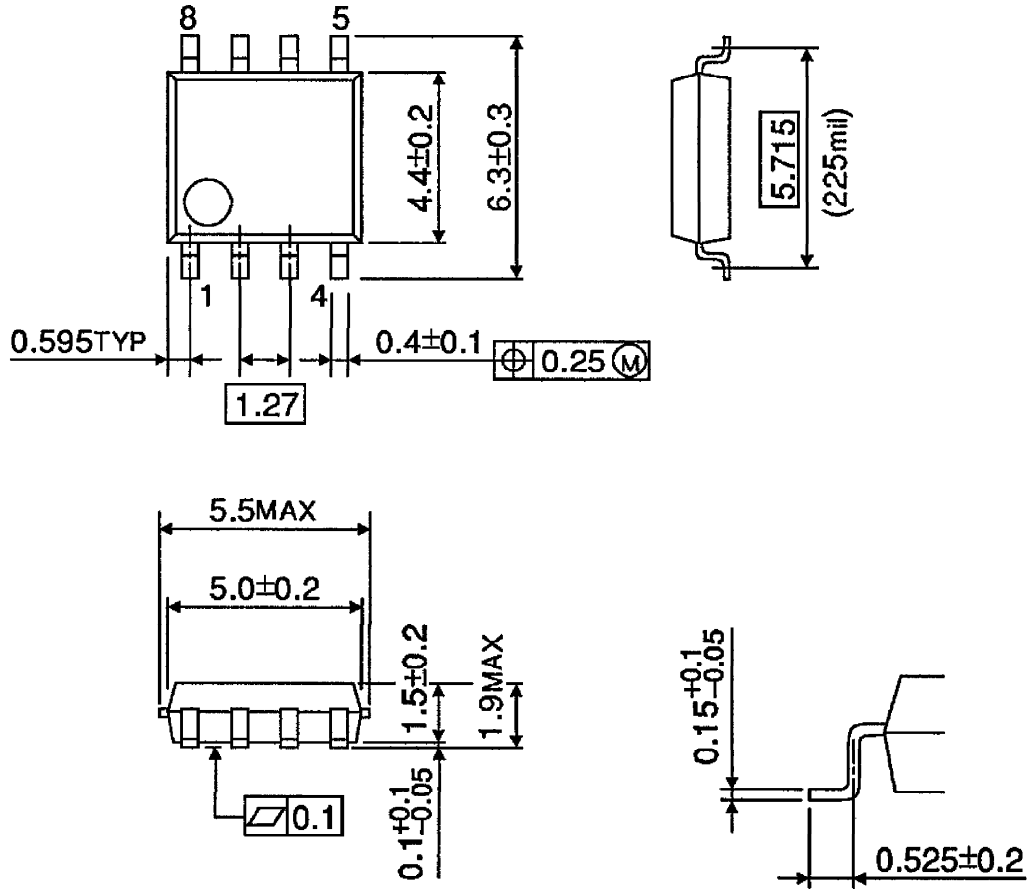


Weight : 0.9g (Typ.)



OUTLINE DRAWING  
SOP8-P-225-1.27

Unit : mm



Weight : 0.1g (Typ.)