

TA7337P

TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT
SILICON MONOLITHIC

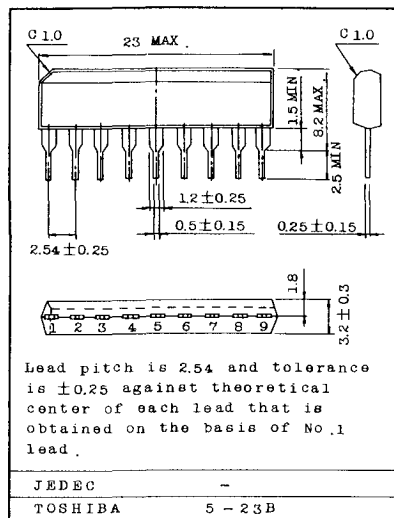
TENTATIVE

LIMITER AMPLIFIER AND DETECTOR for a TV SIF

The TA7337P contains a limiting amplifier and an FM detector in a single-in-line plastic package. This device is especially recommended as a sound multiplex SIF subsystem requiring few external components and only one tuning adjustment for the 4.5MHz tank circuit. This device has an output polarity reverse to the TA7314P's.

- . Detector with single tuned coil
- . Excellent AM rejection ratio;
50dB (typ.)
- . Wide supply voltage range;
VCC = 8 ~ 15V
- . Minimum numbers of external parts requires.

Unit in mm



Lead pitch is 2.54 and tolerance is ± 0.25 against theoretical center of each lead that is obtained on the basis of No.1 lead.

MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V ₄	15	V
Input Voltage	V ₂	0.7	V _{rms}
Power Dissipation (Note)	P _D	625	mW
Operating Temperature	T _{opr}	-20 ~ 75	°C
Storage Temperature	T _{stg}	-55 ~ 125	°C

Note : Derated above Ta=25°C



INTEGRATED CIRCUIT

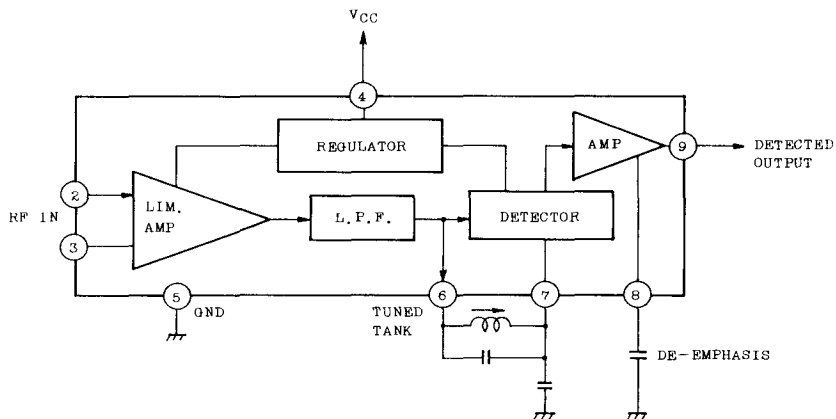
TECHNICAL DATA

TA7337P

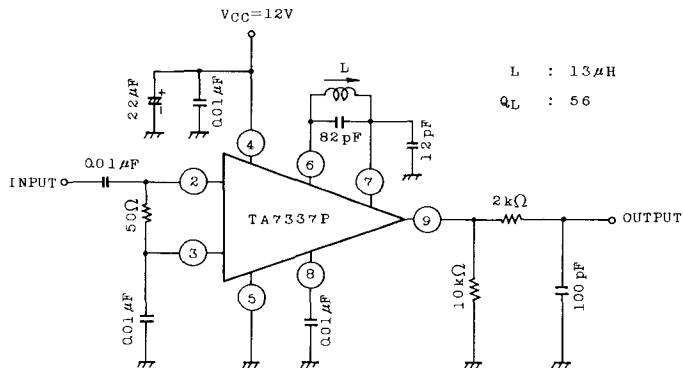
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$, $V_{CC}=12\text{V}$)

CHARACTERISTIC		SYMBOL	TEST CIRCUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Voltage		V_{CC}	-	-	8	-	15	V
Supply Current		I_{CC}	-	-	-	-	25	mA
Output terminal Voltage		V_O	1	$V_{in}=0$	-	5	-	V
Detected Output Voltage		V_{OD}	1	$f=4.5\text{MHz}$, $f_m=400\text{Hz} \pm 25\text{kHz}$ $V_{in}=100\text{mV}$	0.8	-	1.6	Vrms
Total Harmonic Distortion		THD	1					
Limiting Sensitivity		$V_{in(lin)}$	1	-3dB of the Max. Output	-	-	500	μVrms
AM Rejection Ratio		AMR	1	$V_{in}=100\text{mVrms}$, FM 25kHz, 400Hz AM $m=0.3$, 400Hz	-	50	-	dB
Input Impedance	Parallel Input Resistance	r_{ip}		$f=4.5\text{MHz}$	-	17	-	k Ω
	Parallel Input Capacitance	c_{ip}		$f=4.5\text{MHz}$	-	4	-	pF
Output Impedance	Parallel Output Resistance	r_{op}		$f=4.5\text{MHz}$	-	2	-	k Ω
	Parallel Output Capacitance	c_{op}		$f=4.5\text{MHz}$	-	3	-	pF

BLOCK DIAGRAM



TEST CIRCUIT 1





INTEGRATED CIRCUIT

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