

**LB3500**

Monolithic Digital Integrated Circuit  
1/8 PRESCALER FOR PLL ELECTRONIC TUNING

The LB3500 is an ECL prescaler with 1/8 frequency division ratio developed for use in PLL electronic tuning FM radio application. Adoption of high performance bipolar process enables the frequency division of 150MHz max.

**Features**

- . FM frequency can be divided into C-MOS operating frequency.
- . Control pin is provided to inhibit the operation of prescaler when it is not in use.
- . If used in conjunction with our PLL synthesizer LC7220, electronic tuning system can be formed.

**Absolute Maximum Ratings at  $T_a=25^\circ\text{C}$**

Maximum Supply Voltage	$V_{CCmax}$	8	V
Allowable Power Dissipation	$P_{dmax}$	$T_a=75^\circ\text{C}$	200 mW
Operating Temperature	$T_{opg}$	-20 to +80	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-40 to +125	$^\circ\text{C}$

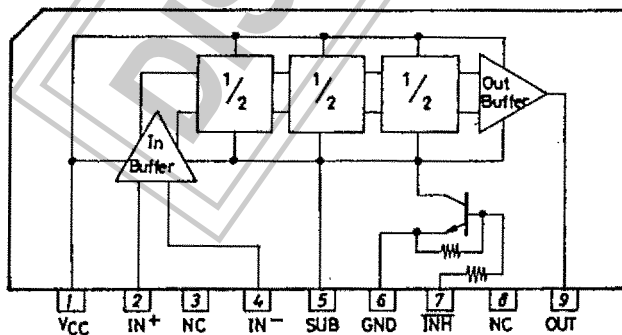
**Allowable Operating Condition at  $T_a=25^\circ\text{C}$**

Supply Voltage Range	$V_{CC}$	min	typ	max	unit
		4.5		5.5	V

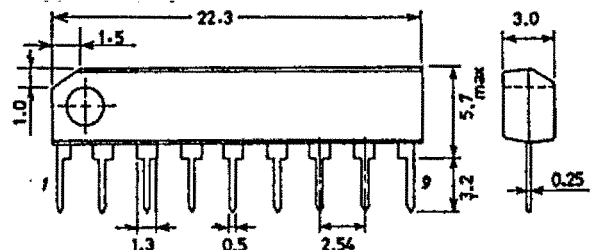
**Electrical Characteristics at  $T_a=25^\circ\text{C}$**

Current Dissipation	$I_{CC}$	min	typ	max	unit
			16	24	mA
Maximum Operating Frequency	$f_{max}$	$v_{in}=150\text{mV}_{rms}$		150	MHz
Minimum Operating Frequency	$f_{min}$	$v_{in}=150\text{mV}_{rms}$		30	MHz
Input Voltage Range	$V_{IN}$			100	600 $\text{mV}_{rms}$
Output Amplitude	$V_{OUT}$			0.9	V <sub>p-p</sub>
$\overline{INH}$ Pin High Level Voltage	$V_{\overline{INH}}(H)$			3	5.5 V

**Equivalent Circuit Block Diagram and Pin Assignment**



**Case Outline 3017B-S9IC (unit:mm)**

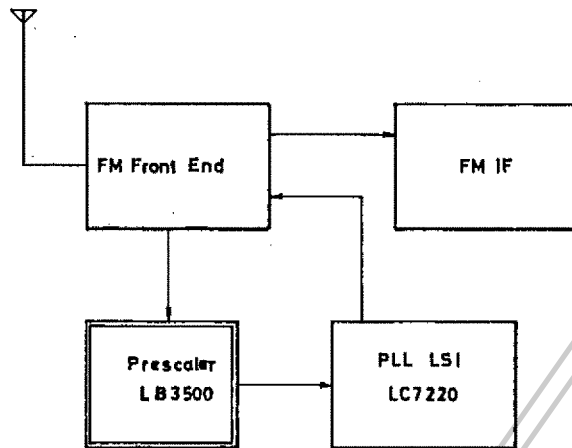


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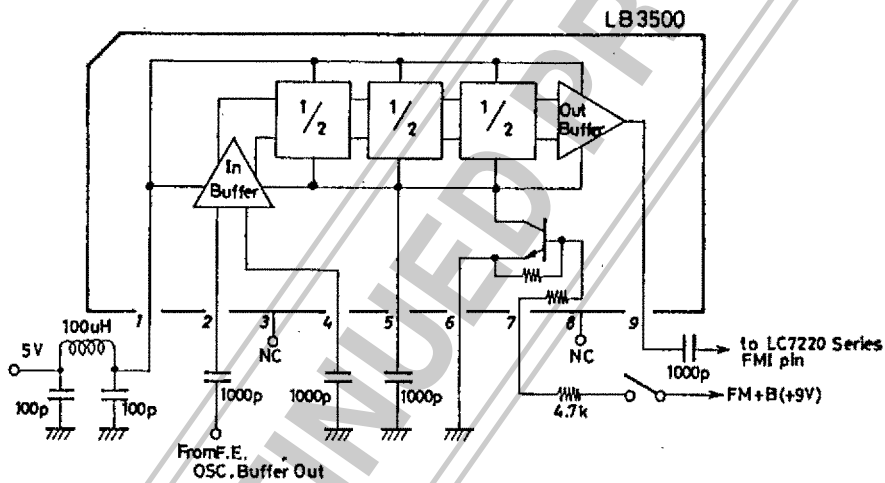
These specifications are subject to change without notice.

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SANYO PLL Synthesizer Tuner System



Application Circuit



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