

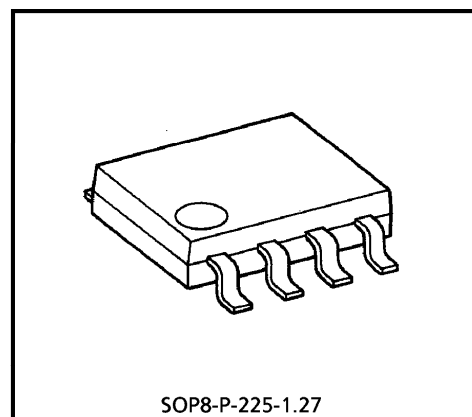
TD6134AF

ECL PRESCALER FOR DIGITAL SYNTHESIZED TUNER

TD6134AF is a 2 modulus prescaler developed for low operating voltage digital synthesized tuner, and can operate up to 250MHz.

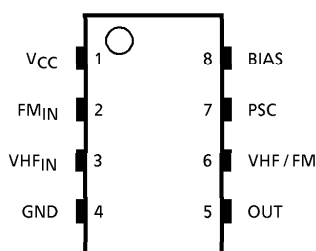
FEATURES

- Operating frequency range is 50~250MHz.
- 2 modulus prescaler : $N = 4 \times 15 / 16$
and $N = 8 \times 15 / 16$
- Input voltage sensitivity is $25mV_{RMS}$.
- 3V low operating supply voltage
- The package is SOP8 pins.

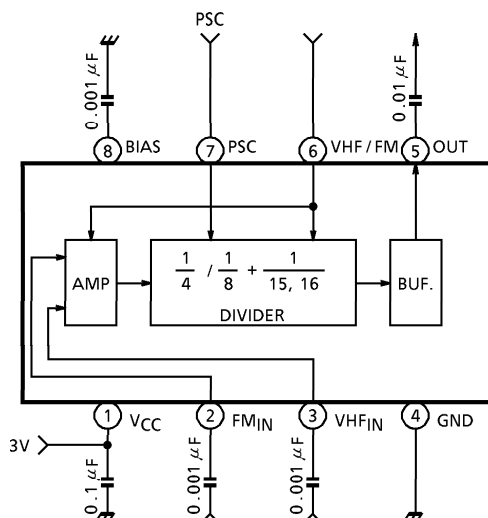


SOP8-P-225-1.27
Weight : 0.08g (Typ.)

PIN CONNECTION (TOP VIEW)



BLOCK DIAGRAM



(Note) This device is vulnerable to surge voltages.
Take it into account when using this device in your system.

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PIN FUNCTION

PIN No.	SYMBOL	FUNCTION	REMARKS
1	V _{CC}	Power supply terminal.	—
2	FM _{IN}	Signal input terminal from FM local oscillator.	—
3	VHF _{IN}	Signal input terminal from TV VHF local oscillator.	—
4	GND	Ground terminal.	—
5	OUT	Divider signal output terminal.	—
6	VHF/FM	Dividing mode control terminal. "H" level input : VHF _{IN} is selected, 1/8 mode. "L" level input : FM _{IN} is selected, 1/4 mode.	—
7	PSC	2 modulus mode control terminal. "H" level input : N = 4/8 × 16 "L" level input : N = 4/8 × 15	—
8	BIAS	Bias capacitor terminal. Bias capacitor is connected.	—

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Power Supply Voltage	V _{CC}	6.5	V
Power Dissipation	P _D	200	mW
Input Voltage	V _{IN}	-0.3 ~ V _{CC} + 0.3	V
Operating Temperature	T _{opr}	-10 ~ 60	°C
Storage Temperature	T _{stg}	-55 ~ 150	°C

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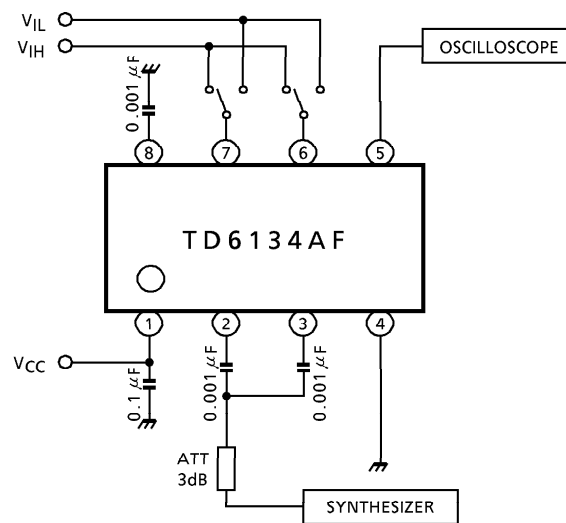
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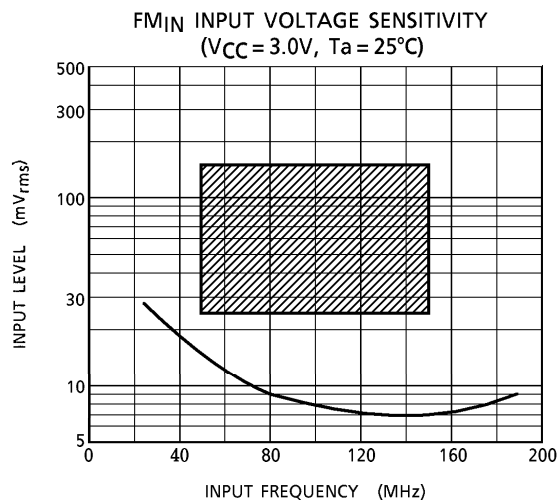
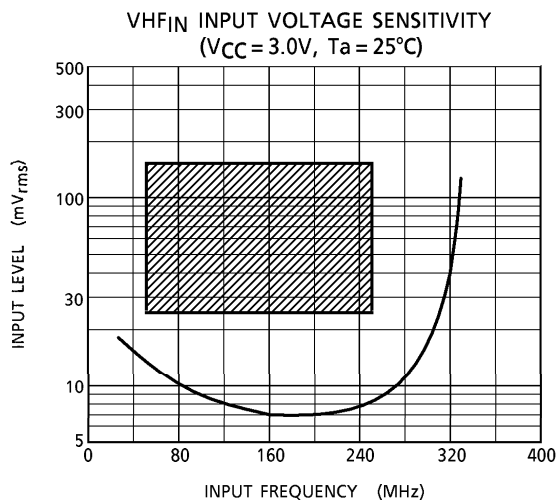
ELECTRICAL CHARACTERISTICS


(Unless otherwise specified, $V_{CC} = 1.8 \sim 5.5V$, $T_a = -10 \sim 60^\circ C$, $f_{in} = 50 \sim 250MHz$)

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Supply Voltage	V_{CC}	—	—	1.8	3.0	5.5	V	
Supply Current	I_{CC}	—	$V_{CC} = 3.0V$	—	5.5	9.5	mA	
Operating Frequency Range	$f_{IN\ 1}$	—	FM _{IN}	50	—	150	MHz	
	$f_{IN\ 2}$	—	VHF _{IN}	50	—	250		
Input Voltage Range	V_{IN}	—	—	25	—	150	mV _{rms}	
Output Amplitude	V_{OUT}	—	—	0.5	—	—	V _{p-p}	
Input Voltage	"H" Level	V_{IH}	—	PSC, VHF / FM	1.6	—	V	
	"L" Level	V_{IL}	—	PSC, VHF / FM	0	—		1.0
Input Current	"H" Level	I_{IH}	—	PSC VHF / FM $V_{CC} = 5.0V, V_{IH} = 4.0V$	—	—	60	μA
	"L" Level	I_{IL}	—	PSC VHF / FM $V_{CC} = 5.0V, V_{IL} = 1.0V$	—	—	10	

TEST CIRCUIT (Input voltage sensitivity)

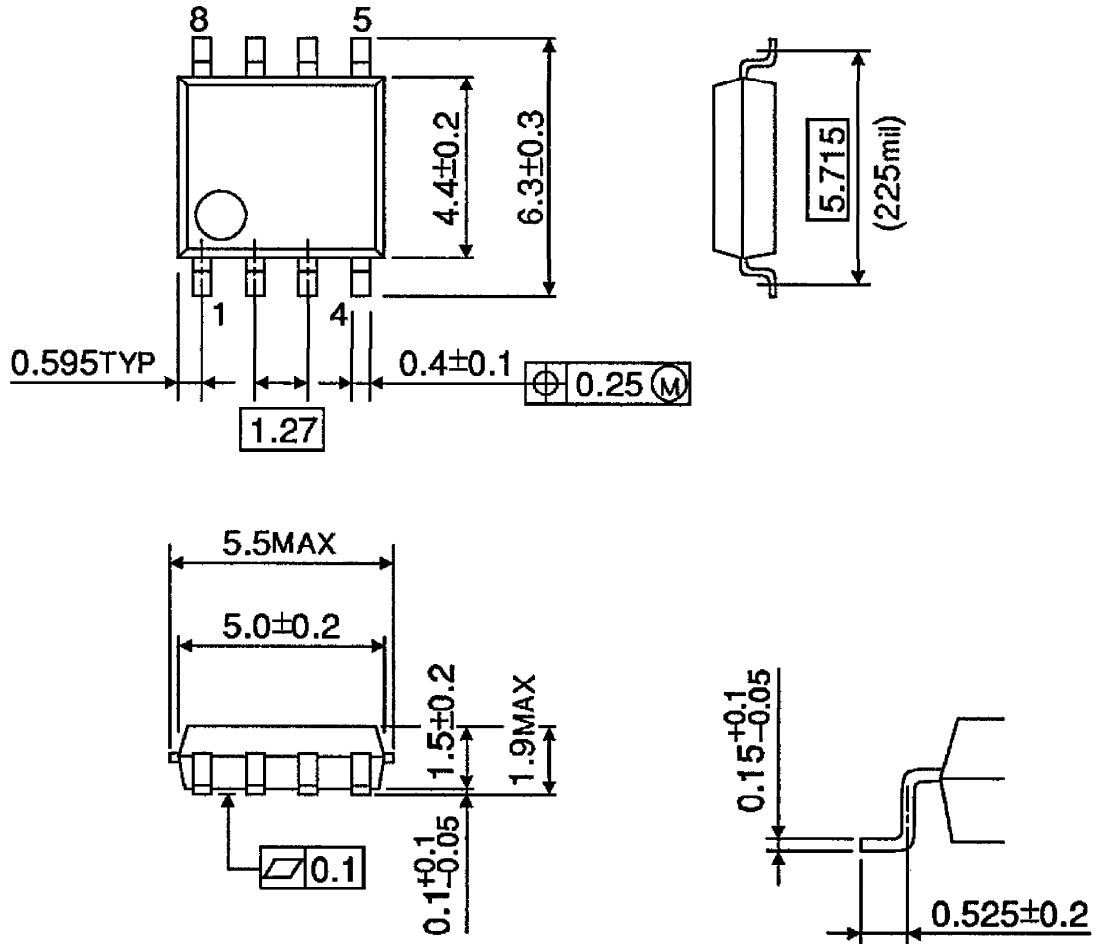




(Note)  Operating Range (V_{CC} = 1.8~5.5V, T_a = -10~60°C)

OUTLINE DRAWING
SOP8-P-225-1.27

Unit : mm



Weight : 0.08g (Typ.)