REFERENCE DATA

SPECIFICATION

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SIGNATURE	DATE
DRAWN BY Hiroshi Sakazume	12 Sep. 1997
CHECKED BY Hiroshi Kondo	12 Sep. 1997
APPROVED BY M. Tanaka	22 Sep. 1997
QC. APPROVED BY Hideo Wakasugi	19. SEP. 1997

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1. Purpose

This part drawing defines the requirements for TK14584M.
(FM IF System)

2. TOKO Part Number

TK14584M

3. Function

FM IF IC

4. Applications

Communication Apparatus

5. Structure

The structure is a silicon monolithic bipolar circuit

6. Package Outline

12Lead－Shrink Small Outline Package　:SSOP-12 (MFP12)

7. Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Rating	Unit	Condition
Supply Voltage	$V_{CC\ MAX}$	6.0	V	
Power Dissipation	P_D	250	mW	※
Operating Voltage Range	V_{OP}	2.3 ～ 5.5	V	
Storage Temperature Range	Tstg	-55 ～ +150	℃	
Operating Temperature Range	T_{OP}	-30 ～ +85	℃	
Operating Frequency Range	f_{OP}	6 ～ 22 (IF)	MHz	
		～ 1 (Demodulation)	MHz	

※ P_D must be derated at rate of 2.0mW／℃ for operation at 25℃.

8. Electrical Characteristics

Condition : Ta=25℃ , Vcc=3V , fin=10.7MHz , fm=1kHz , Mod=±50kHz

Parameter	Symbol	Value			Unit	Condition
		MIN	TYP	MAX		
Supply Current 1	Icc 1		3.5	5.0	mA	None input
Supply Current 2	Icc 2		0.2	5.0	uA	PS=ON, None input
IF						
Output Voltage	Vo	120	200	360	mVrms	-30dBm input
Distortion	THD		0.5	2.0	%	-30dBm input
Signal to Noise Resistance	S/N	60	70		dB	-30dBm input
12dB SINAD	SINAD		-89	-83	dBm	
Limiter Input Resistance	RIFIN	1.4	1.8	2.2	k Ω	
Gain	G	69	75		dB	
RSSI						
RSSI Output Voltage 1	VRSSI 1	0.00	0.20	0.30	V	none input
RSSI Output Voltage 2	VRSSI 2	0.40	0.55	0.70	V	-60dBm none-mod input
RSSI Output Voltage 3	VRSSI 3	1.05	1.20	1.40	V	-30dBm none-mod input
RSSI Output Voltage 4	VRSSI 4	1.50	1.70	1.95	V	0dBm none-mod input

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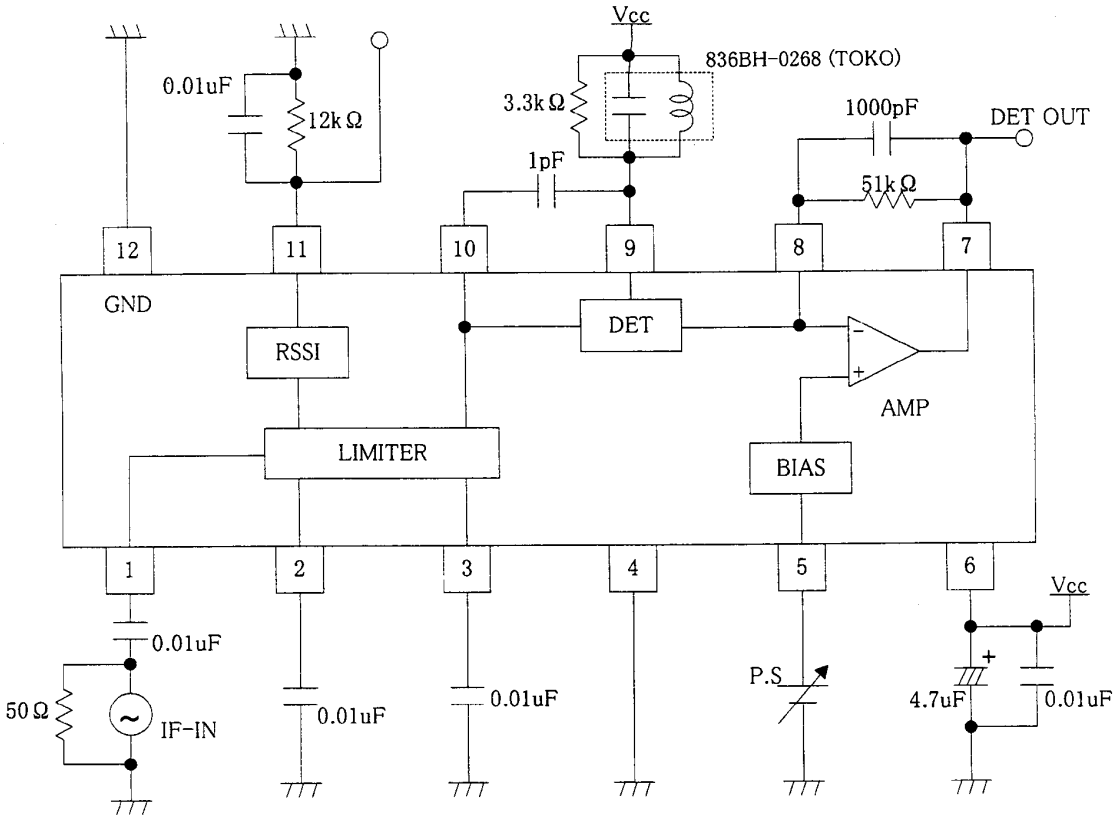
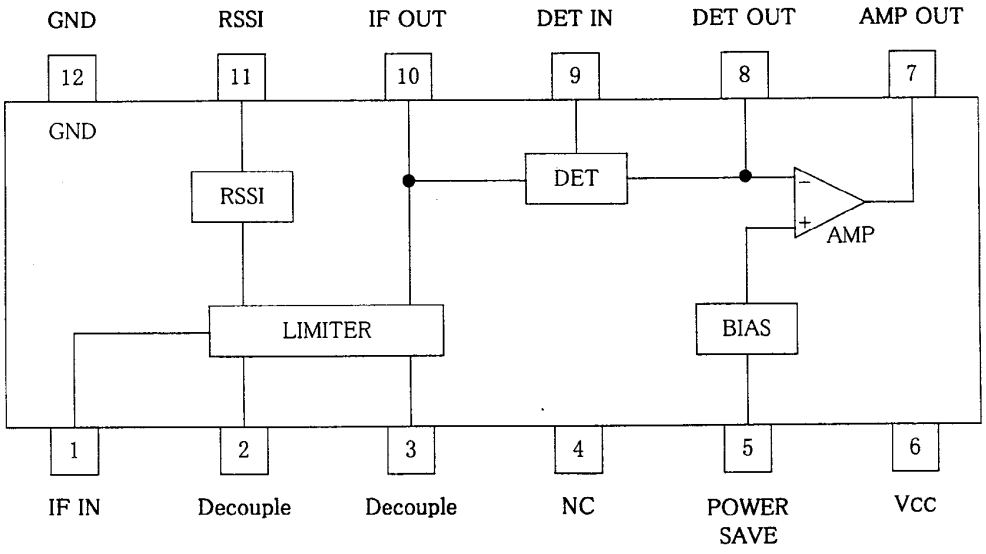
9. Test Circuit



10. Pin Assignment／Block Diagram



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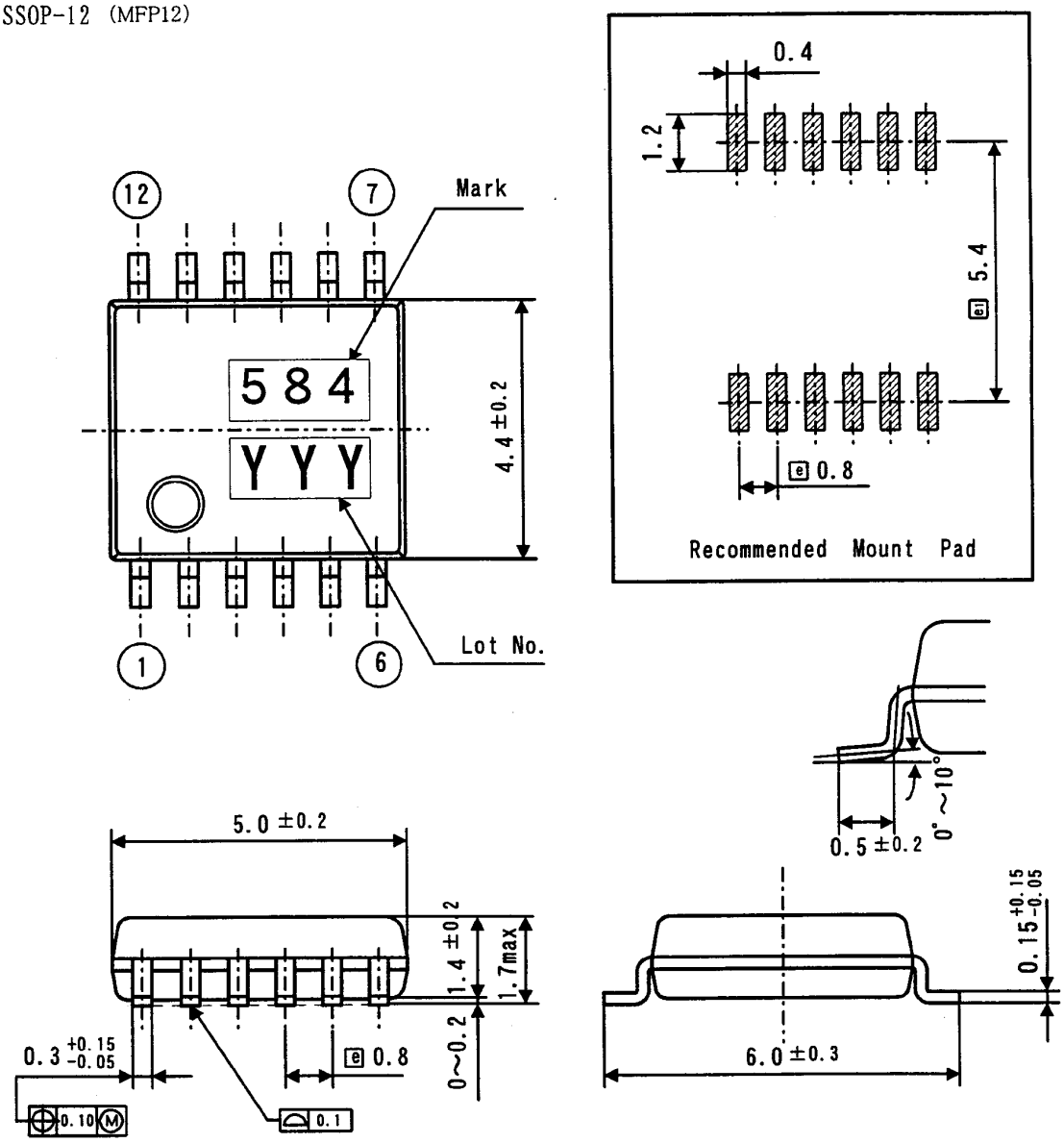
11. Package Outline Dimensions/Marking

SSOP-12 (MFP12)



Molded Resin	:	Epoxy Resin
Lead Frame	:	42 Alloy
Terminal Treatment	:	Solder Plating(5~15 μm)
Mark Method	:	Ink
Country of Origin	:	Korea
Weight	:	0.071g

Unit	:	mm
General Tolerance	:	±0.2

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12. Cautions

12-1. WARNING - Life support applications policy
TOKO,INC. products shall not be used within any life support systems without the specific written consent of TOKO,INC. A life support system is a product or system intended to support or sustain life which, if it fails, can be reasonably expected to result in a significant personal injury or death.

12-2. Examples of characteristics given here are typical for each product and being technical data, these do not constitute a guarantee of characteristics or conditions of use.
The circuits shown in this specification are intended to explain typical applications of the products concerned. Accordingly, TOKO is not responsible for any circuit problems, nor for any infringement of third party patents or any other intellectual property rights that may arise from the use of these circuits. Moreover , this catalog dose not signify that TOKO agrees implicitly or explicitly to license any patent rights or other intellectual property rights which it holds.

12-3. This part is not designed for anti-nuclear radiation structure.
Please do not use this part in an environment where nuclear radiation may occur.

12-4. We may not accept the return of parts damaged by careless handling.

1 3. Others

13-1. No Ozone Depleting Substances were used in the manufacture of theses parts.

13-2. No material used in this part contain brominated PBBOs or PBBs as the flame-retardant.

13-3. In the event of any confusion concerning this "Specifications", both parties shall settle such confusion through reasonable discussions.

13-4. The announcement number of CISTEC list is as follows.
TK14584****** No. : 0002500010000370 Announcement time : August 1997

13-5. For the cautions to storage and device mounting, please refer to the Quality Specification No. QH7-**B114**.

13-6. For the package, please refer to the Package Specification No. DP3-G016.