

**TD6105AP, TD6106AP, TD6107P, TD6108P
TD6110P, TD6111P TD6112P, TD6113P**

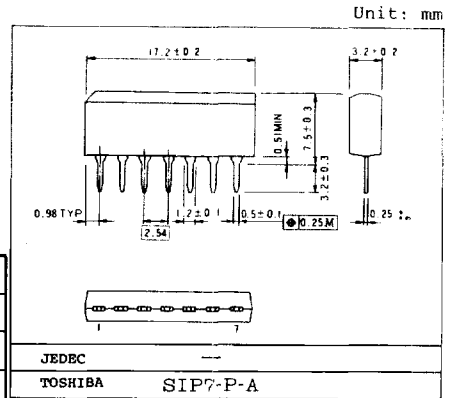
ULTRA HIGH SPEED PRESCALER

- . High Speed : 1GHz (Max.)
- . High Input Sensitivity : -20dBm
- . Low Power Dissipation

MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V _{CC}	6.5	V
Input Terminal Voltage	V _{in}	2.0	V
Power Dissipation (Note)	P _D	625	mW
Operating Temperature	T _{opr}	-10 ~ 65	°C
Storage Temperature	T _{stg}	-55 ~ 150	°C

Note : Derated above Ta=25°C in the proportion of 5mW/°C.



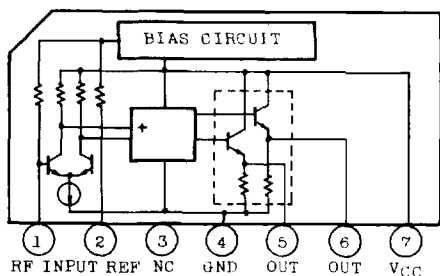
ELECTRICAL CHARACTERISTICS (V_{CC}=5.0V, Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CIRCUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT		
Supply Voltage		V _{CC}				4.5	5.0	5.5	V		
Supply Current	TD6105AP	I _{CC}	1	Function	Output Level	ECL	-	25	60	mA	
	TD6106AP							25	60	mA	
	TD6107P							33	70	mA	
	TD6108P							33	70	mA	
	TD6110P					TTL	-	35	70	mA	
	TD6111P							35	70	mA	
	TD6112P							ECL	33	70	mA
	TD6113P							TTL	35	70	mA
Input Sensitivity		V _{in 1}	1	f _{in} =0.1 ~ 0.2Hz		-18	-	3	dBm		
	V _{in 2}	f _{in} =0.2 ~ 1GHz		-20	-	3	dBm				
Output Level	ECL Type	Amplitude	1			-	0.7	-	V _{p-p}		
		"H" Level				-	4.3	-	V		
		"L" Level				-	3.6	-	V		
	TTL Type	Amplitude	1			-	2.0	-	V _{p-p}		
		"H" Level				1.8	-	-	V		
		"L" Level		Output Current=-5mA		-	-	0.4	V		

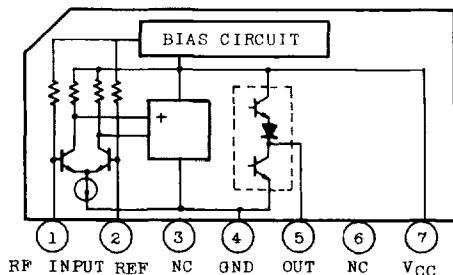
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BLOCK DIAGRAM

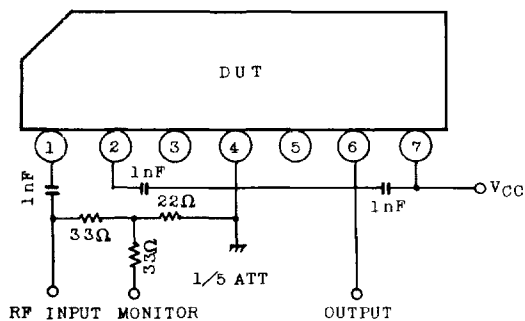
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TEST CIRCUIT 1



0dBm=1mW, 50Ω

CAUTION:

These devices are easy to be damaged by high static voltage or electric fields.

In regards to this, please handle with care.