

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

ULTRA HIGH SPEED PRESCALER

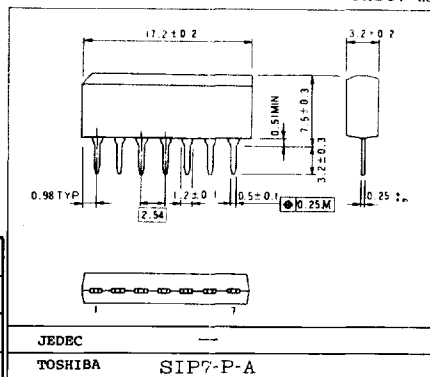
- High Speed : 1GHz (Max.)
- High Input Sensitivity : -20dBm
- Low Power Dissipation

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.

Unit: mm



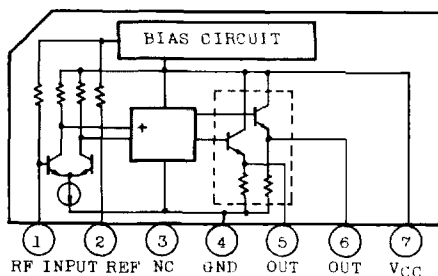
ELECTRICAL CHARACTERISTICS (V_{CC}=5.0V, Ta=25°C)

CHARACTERISTIC			SYMBOL	TEST CIR- CUIT	TEST CONDITION			MIN.	TYP.	MAX.	UNIT
Supply Voltage			V _{CC}					4.5	5.0	5.5	V
Supply Current	TD6105AP	I _{CC}	1	Func- tion	1/4	Output Level	ECL	25	-	60	mA
	1/8				25			-	60	mA	
	1/64				33			-	70	mA	
	1/256				33			-	70	mA	
	1/64				TTL		35	-	70	mA	
	1/256						35	-	70	mA	
	1/128						ECL	33	-	70	mA
	1/128						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	V _O	1				-	0.7	-	V _{p-p}
		"H" Level	V _{OH}					-	4.3	-	V
		"L" Level	V _{OL}					-	3.6	-	V
	TTL Type	Amplitude	V _O	1				-	2.0	-	V _{p-p}
		"H" Level	V _{OH}					1.8	-	-	V
		"L" Level	V _{OL}		Output Current=-5mA			-	-	0.4	V

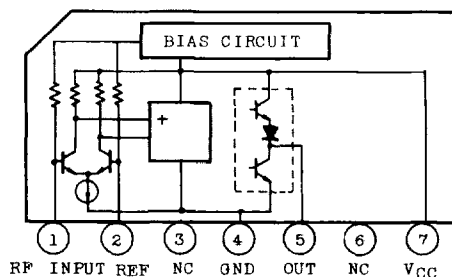
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BLOCK DIAGRAM

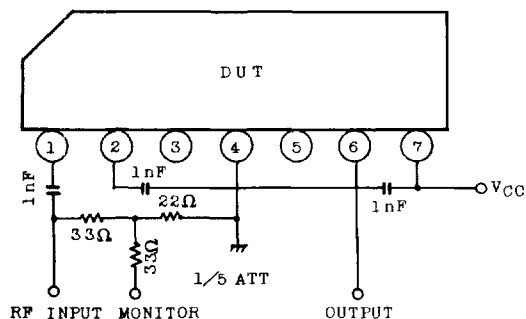
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TEST CIRCUIT 1



OdBm=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.