

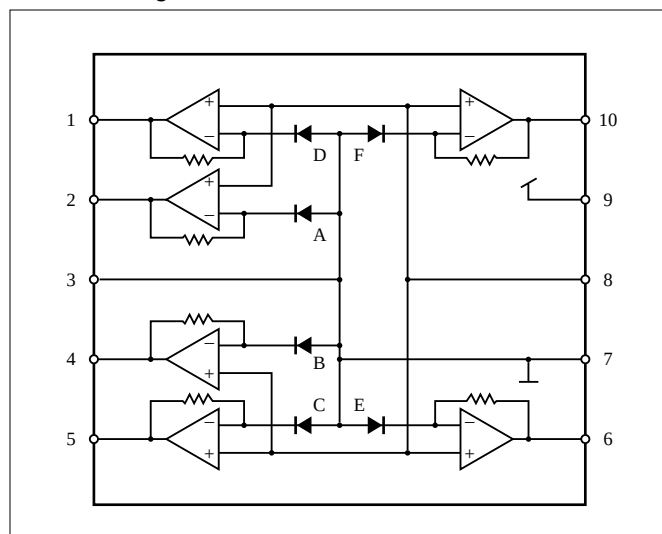
PNA4211F

Bipolar Integrated Circuit with Photodetection Function

Features

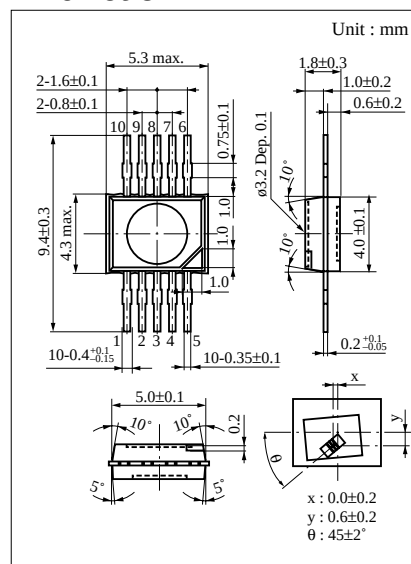
- Built-in amplifier circuit
- Supports CD and 4-speed CD-ROM

Block Diagram

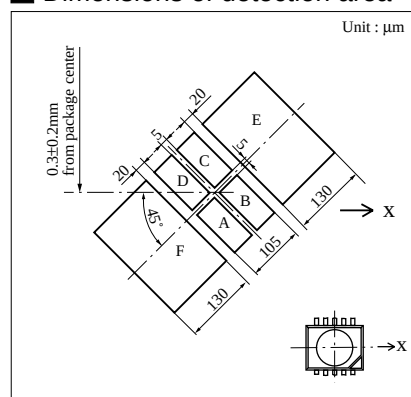


Pin Description

Pin No.	Function	Pin No.	Function
1	D Out	6	E Out
2	A Out	7	COMMON GND
3	COMMON GND	8	V _C
4	B Out	9	V _{CC}
5	C Out	10	F Out



Dimensions of detection area



■ Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Ratings	Unit
Power supply voltage	V_{CC}	+6	V
Power dissipation	P_D	115	mW
Operating ambient temperature	T_{opr}	-20 to +70	°C
Storage temperature	T_{stg}	-30 to +95	°C

■ Electro-Optical Characteristics ($V_{CC} = 2.5V$, $V_{ref} = 0V$, $V_{EE} = -2.5V$, $R_L = 10k\Omega$, $T_a = 25^\circ C \pm 3^\circ C$)

Parameter	Symbol	Conditions	min	typ	max	Unit
Current of all circuits	I_{CC}			2.2	4.0	mA
Output voltage	V_O	$P_1 = 10\mu W$, $\lambda = 780nm$, A to D		300		mV
		$P_1 = 10\mu W$, $\lambda = 780nm$, E, F		660		
Output offset voltage	$V_{O(offset)}$		-20	0	+20	mV
Output offset voltage difference	$\Delta V_{O(offset)}$	$(A + C) - (B + D)$	-20	0	+20	mV
		$E - F$	-20	0	+20	
Frequency characteristics	f_c	$\lambda = 780nm$, -3dB, A to D		8		MHz

Note 1) The reference voltage for the output voltage and output offset voltage is V_{ref} (8-pin voltage).

Note 2) The output voltage does not include the output offset voltage.