

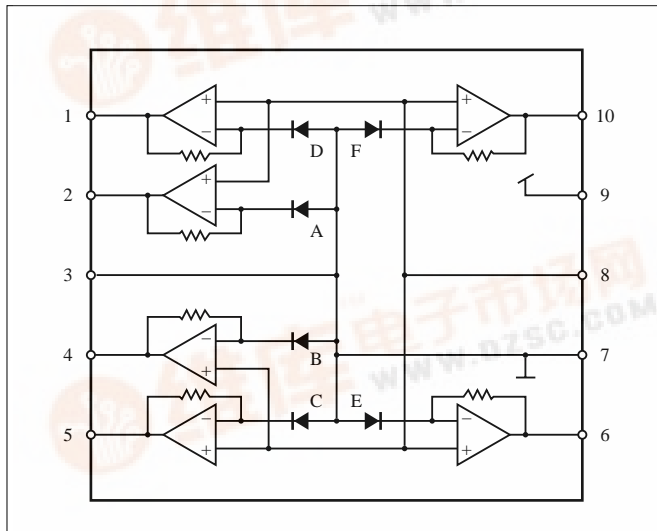
PNA4211F

Bipolar Integrated Circuit with Photodetection Function

Features

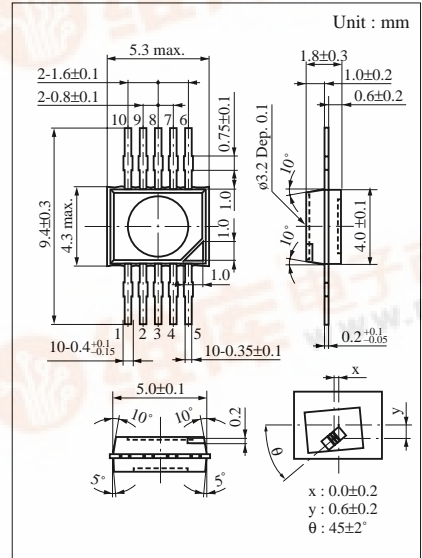
- Built-in amplifier circuit
- Supports CD and 4-speed CD-ROM

Block Diagram

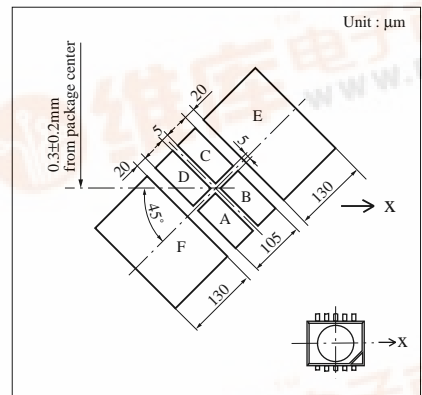


Pin Description

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 = 10kΩ, Ta = 25°C ± 3°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 = 10μW, λ = 780nm, A to D		300		mV
		P ₁ = 10μW, λ = 780nm, E, F		660		
Output offset voltage	V _{O(offset)}		-20	0	+20	mV
Output offset voltage difference	ΔV _{O(offset)}	(A + C) - (B + D)	-20	0	+20	mV
		E - F	-20	0	+20	
Frequency characteristics	f _c	λ = 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.