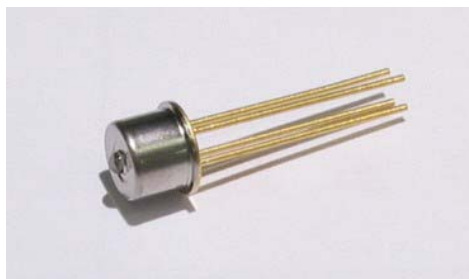




AC6204 Series

622 Mbps 4-pin PIN-TIA in TO Package



Features:

- InGaAs Photodiode with TIA
- TO-46 package with ball lens
- Differential output with +3.3V supply
- Wide operation temperature (-40°C to +85°C)
- High reliability
- Suitable for long wavelength 622Mbps applications

Electrical/Optical Characteristics ($T_c=25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Power Supply	V_{cc}	3.0	3.3	3.6	V
Supply Current ⁽¹⁾	I_{cc}		21		mA
Bandwidth	BW	400			MHz
Low-Frequency Cut Off	LF		20		kHz
Rise Time/Fall Time ^(2,3)	Tr/Tf		500		ps
Wavelength	λ	1100		1650	nm
Single Ended Output Impedance	R_o		75		Ohms
Saturation Power ^(3,4)	P_{sat}		+3		dBm
Sensitivity ^(3,4)	P_{sens}		-33	-31	dBm
Conversion Gain ⁽⁵⁾			12		kV/W
Differential Output Voltage ⁽⁶⁾	V_{diff}		240		mVpp

(1) No Loads

(2) 20% to 80% at -20dBm input

(3) $\lambda=1550\text{nm}$

(4) BER = 10^{-10} , PRBS $2^{31}-1$, ER = 15dB

(5) Single ended output voltage (peak to peak) to optical power swing at -30dBm

(6) Into 50 Ohms

Absolute Maximum Ratings:

Parameter	Symbol	Min	Max	Unit
Case Temperature	T_C	-40	+85	°C
Storage Temperature	T_{stg}	-40	100	°C
Humidity Range	RH	5	95	%
Amplifier Bias Voltage	V_{ccmax}		5.5	V
Input Optical Power	P_{max}		+5	dBm
Load Solder Temp. and Time			260 °C, 10sec	

Ordering Information:

AC6204-X-Y

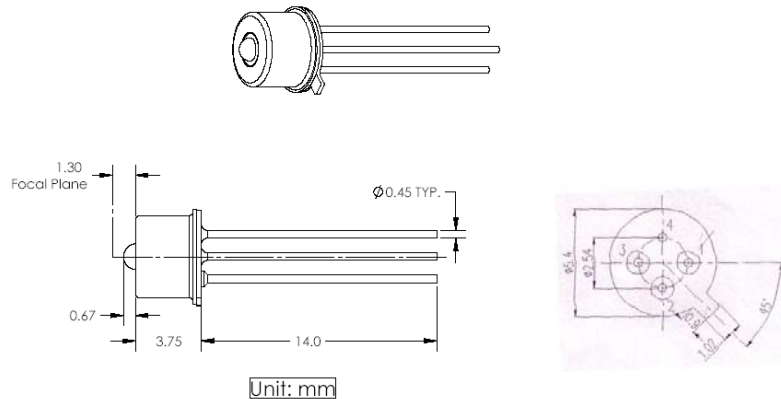
X = Pin-out: "A," (Custom pin-out available)

Y = TO-Cap: "S" for standard ball lens

4-pin Pin-out Assignment

Pin #	"A"
1	Vcc
2	Dout-N
3	Dout-P
4	GND

Outline Drawing:



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