



AC6211 Series

1.25 Gbps Receiver in 5-pin TO Package



Features:

- Wide dynamic range with differential output
- Low power +3.3V operation
- Wide operation temperature (-40°C~ +85°C)
- High reliability
- Suitable for 1.25Gbps applications needing receptacle or pigtail module

Applications: Telecom and Datacom

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}		30	39	mA
Photodetector Bias	V_{PD}		3.3		V
Bandwidth	BW	0.8	1.0		GHz
Low-Frequency Cut Off	LF		50		kHz
Rise Time/Fall Time ^(2,3)	Tr/Tf			250	ps
Wavelength	λ	1100		1650	nm
Single Ended Output Impedance	R_o		50		Ohms
Saturation Power ^(3,4)	P_{sat}	+2	+3		dBm
Sensitivity ^(3,4)	P_{sens}		-26	-25	dBm
Conversion Gain ^(3,5)		10	13		kV/W
Differential Output Voltage	V_{diff}		240		mVpp

(1) No Loads

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

(3) $\lambda=1550\text{nm}$, 0.9A/W

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

(5) Single ended output voltage (peak to peak) to optical power swing (OMA)

Absolute Maximum Ratings:

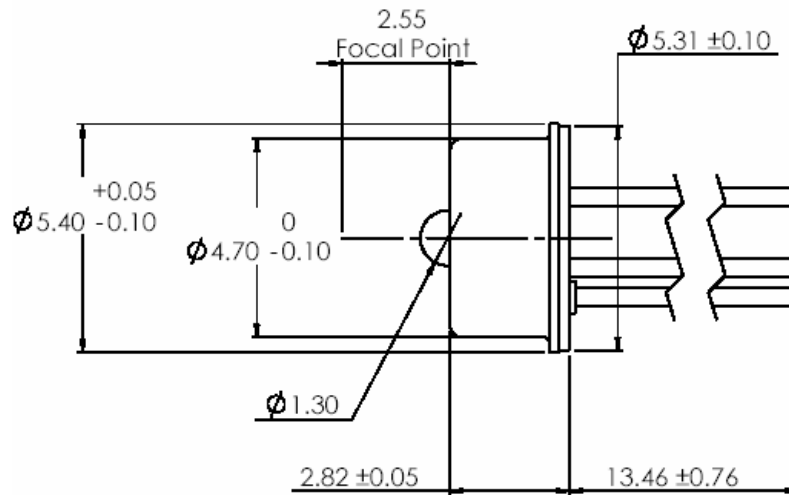
Parameter	Symbol	Min	Max	Unit
Case Temperature	T_C	-40	+85	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40	100	$^\circ\text{C}$
Humidity Range	RH	5	95	%
Amplifier Bias Voltage	V_{ccmax}		3.6	V
Input Optical Power	P_{max}		+6	dBm
Load Solder Temp. and Time			260 $^\circ\text{C}$, 10sec	

Outline Drawing (Customer special order is available):

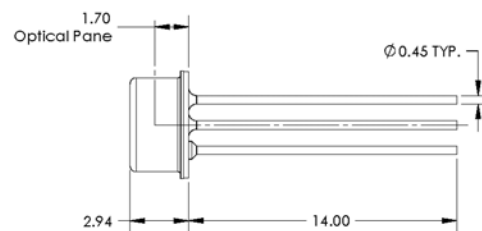
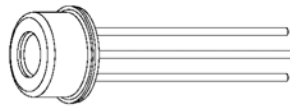
Lens Options

X = S for ball lens, **X = F** for flat window

X = S (Ball Lens)

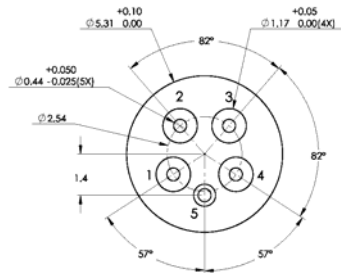


X = F (Flat Window)

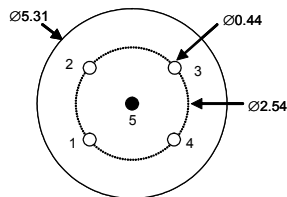


Unit: mm

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**Bottom View for
Pin-out "B" and "E"**



**Bottom View for
Pin-out "F"**

5-pin Pin-out Assignment			
Pin #	"B"	"E"	"F"*
1	Dout-P	V _{PD}	Dout-P
2	V _{CC}	Dout-N	V _{PD}
3	V _{PD}	Dout-P	V _{CC}
4	Dout-N	V _{CC}	Dout-N
5	GND	GND	GND

Note: "F" uses alternate 5-pin header. See Bottom View drawings

Ordering Information:

AC6211-W-X

W = Pin-out: "B," "E" or "F" see table and bottom views.

X = TO-cap: "S" for Ball lens, "F" for Flat window

Example: AC6211-B-S is an Archcom 5-pin, 1.25 Gbps TO-Can receiver with Type-B pin-out and ball lens

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