

1310/1550 nm 2.5 Gbps 5-Pin APD TO-can

AK2F-809x-x Series

TYPE NAME: AK2F-8093-K

Product Description:

The LuxNet AK2F-809x-x 5-pin is designed for Gigabit-Capable Passive Optical Networks (GPON). This APD-TO provides special digital diagnostic capability for transceivers with a wide dynamic range of input optical power. The product is designed for 2.5G Long wavelength optical communication systems.

Product Specifications:

Absolute Maximum Ratings (T = 25°C):

Parameter	Symbol	Unit	Min.	Max.	Note
Operating Temperature	T _{op}	°C	-40	85	
Storage Temperature	T _{stg}	°C	-40	85	
Solder Reflow Temperature	T _{stg}	°C		260	10 seconds max.
Power Supply Voltage	V _P	V	-0.4	4.0	
Optical Power	P _{in}	dBm		-7	

Electro-Optical Characteristics (T = 25°C, unless noted otherwise):

Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
APD Break down voltage	V _{BR}	V	35	45	55	I _d =10uA
Supply Voltage	V _{cc}	V	3.0	3.3	3.6	
Supply Current	I _{cc}	mA	15		24	V _{cc} =3.3V
Sensitivity	S	dBm			-31	λ=1310nm, 2 ²³ - 1 PRBS BER= 10 ⁻¹⁰ , ER=9~10dB
Wavelength	λ	nm	1260	1310	1620	
Rise/Fall Time	τ _r /τ _f	ps		150/150		(20%-80%)
APD Dark Current	I _d	nA		20	150	V _R = 0.9V _B
Overload Power	P _{load}	dBm	-7			2 ²³ - 1 PRBS, BER= 10 ⁻¹⁰ , ER=9~10dB

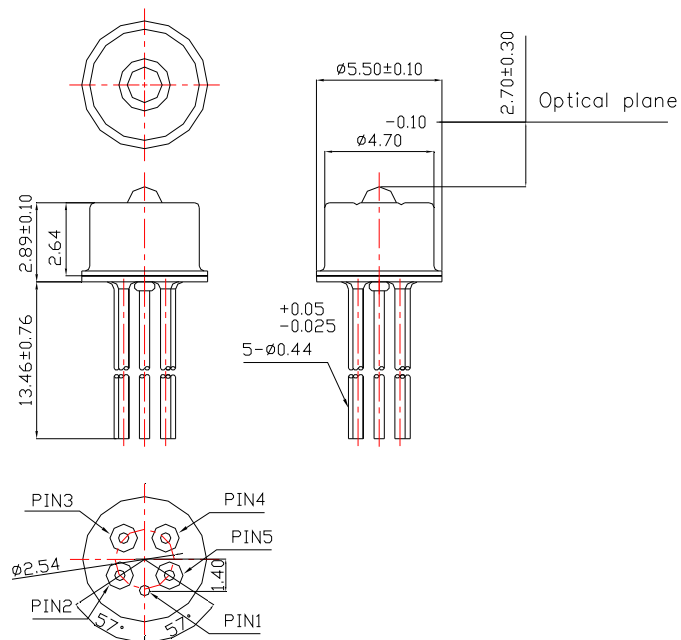
Handling Procedures

“When externally biasing a detector, care should be taken to power up the TIA first and to keep the TIA powered up until after the power supply voltage of the APD is removed. Failure to do this with the TIA unpowered may result in damage to TIA ”

- * Specifications are subject to change without notice.
- * Screening per customer-specified reject limits is available.

Dimensions: (mm)
All dimensions are nominal

AK2F-8093-K (5pin APD-TO)



PINOUT

AK2F-8093-K	
Pin Number	Function
1	GND
2	Non-Inverted output (D+)
3	Vcc
4	Vapd
5	Inverted (D*)

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* Screening per customer-specified reject limits is available.