

1.25Gbps InGaAs PIN-TIA TO-CAN

Model: APIT1250TXXBL-X



Features:

- InGaAs PIN with trans-impedance
- High sensitivity
- Wide temperature range from -40°C to +85°C

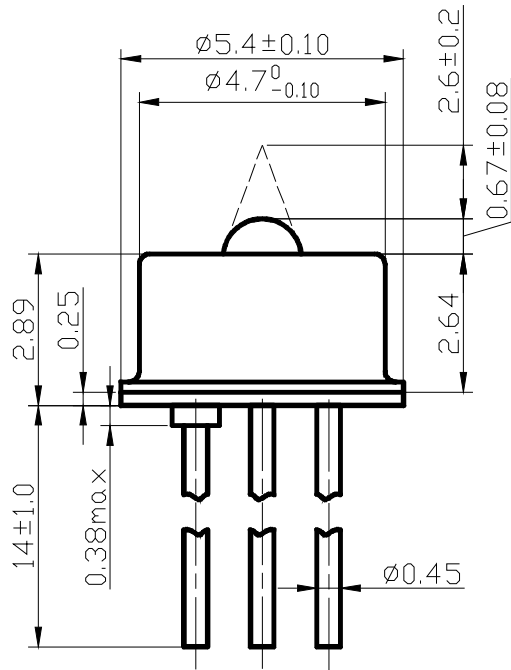
Product Specifications:

Absolute Maximum Ratings(T=25°C)

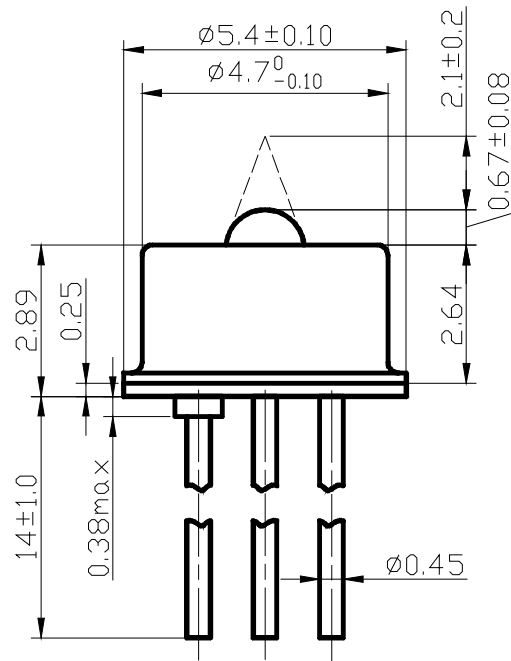
Parameter	Symbol	Unit	Min	Max	Note
Operating Temperature	T _{OP}	°C	-40	85	
Storage Temperature	T _{syg}	°C	-40	100	
Solder Reflow Temperature		°C		260	10 seconds max
Power Supply Voltage	V _P	V	0	4.5	

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

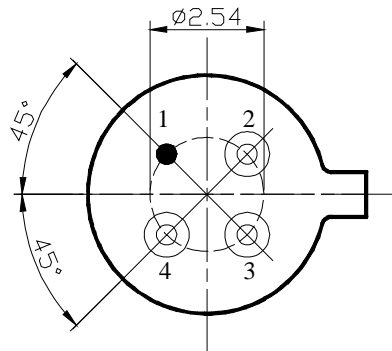
Parameter	Symbol	Unit	Min	Typ	Max	Test Condition
Supply Voltage	V _{cc}	Volts	3.0	3.3	3.6	
Supply Current	I _{cc}	mA	23	28	35	No load, V _{cc} =3.3V
Output Voltage (differential)	V _{out}	mV		160	250	P _{in} = -26dBm R _L =100 Ω
Wavelength Range	λ	nm	1100		1650	
Saturated Optical Power	P _{sat}	dBm	0			1.25Gb/s, λ=1310nm, ER=9, BER=10 ⁻¹⁰ PRBS=2 ⁷ -1
Dark Current	I _d	nA			1	
-3dBm Bandwidth	BW	MHz	730	800		R _L = 50Ω
Sensitivity	Sen.	dBm			-28	1.25Gb/s, λ=1310nm, ER=9, BER=10 ⁻¹⁰ PRBS=2 ⁷ -1

Outline Drawings (in mm):


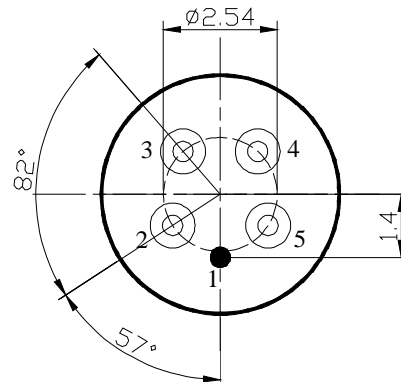
APIT1250TXXBL-A



APIT1250TXXBL-B

PIN-OUT


XX="01"(Bottom View)



XX="07" or "08"(Bottom View)

Pin Assignment			
Number	"01"	"07"	"08"
PIN 1	Gnd	Gnd	Gnd
PIN 2	V _{cc}	Inverted Output	Non-Inverted Output
PIN 3	Inverted Output	V _{cc}	V _{cc}
PIN 4	Non-Inverted Output	MON-current source	MON- current source
PIN 5	-	Non-Inverted Output	Inverted Output



Ordering information:

APIT1250TXXBL-X

PIT: PIN-TIA

1250: 1.25Gbps

XX: Pin-out, "01", "07", "08", see table

BL: TO52 cap

X: "A"= height 2.64mm and focal length $2.6\pm 0.2\text{mm}$

"B"= height 2.64mm and focal length $2.1\pm 0.2\text{mm}$

Precaution:

- (1) The modules should be handled in the same manner as ordinary semiconductor device to prevent the electro-static damages. For safety keeping and carrying, the modules should be packaged with ESD proof material. To assemble the modules on PCB, the workbench, the soldering iron and the human body should be grounded.
- (2) Please pay special attention to the atmosphere condition because the dew on the module may cause some electrical damages.
- (3) Under such a strong vibration environment as in automobile, the performance and reliability are not guaranteed.