

# 155Mbps InGaAs PIN-TIA TO-CAN

**Model: APIT155TXXBL-X-01**



**Features:**

- InGaAs PIN with trans-impedance
- High sensitivity
- Wide temperature range from -40°C to +85°C
- TO46 package

**Product Specifications:**

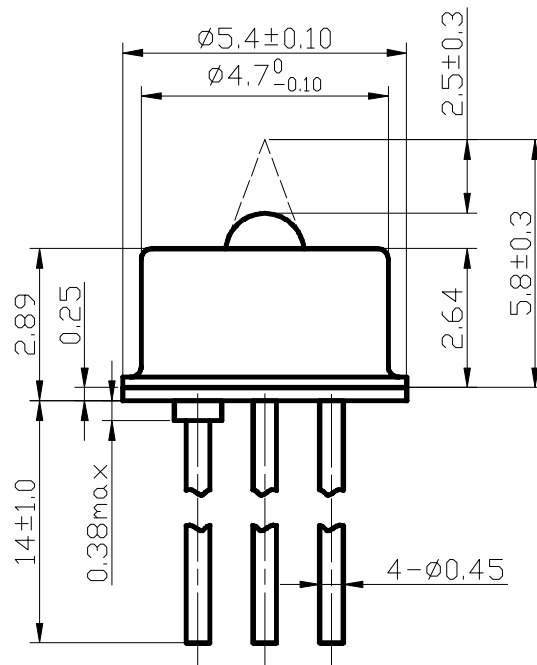
Absolute Maximum Ratings(T=25°C)

Parameter	Symbol	Unit	Min	Max	Note
Operating Temperature	T <sub>OP</sub>	°C	-40	85	
Storage Temperature	T <sub>syg</sub>	°C	-40	100	
Solder Reflow Temperature		°C		260	10 seconds max
Power Supply Voltage	V <sub>P</sub>	V		5.5	

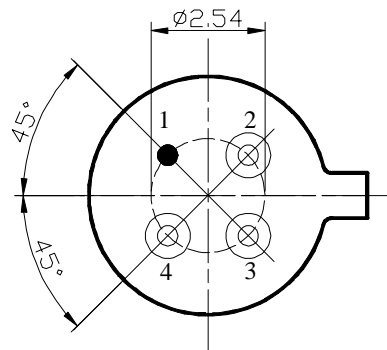
Electro-Optical Characteristics(T=25°C, unless noted otherwise)

Parameter	Symbol	Unit	Min	Typ	Max	Test Condition
Supply Voltage	V <sub>cc</sub>	Volts	3.0	3.3	5.5	
Supply Current	I <sub>cc</sub>	mA	15	17	20	No load, V <sub>cc</sub> =3.3V
Output Voltage (differential)	V <sub>out</sub>	mV	—	300	400	P <sub>in</sub> = -30dBm R <sub>L</sub> =100Ω
Wavelength Range	λ	nm	1100	—	1650	
Saturated Optical Power	P <sub>sat</sub>	dBm	0	—	—	155Mb/s, λ=1310nm, ER=9, BER=10 <sup>-10</sup> PRBS=2 <sup>7</sup> -1
-3dBm Bandwidth	BW	MHz	120	—	—	R <sub>L</sub> = 50Ω
Sensitivity	Sen.	dBm	—	-38	-37	155Mb/s, λ=1310nm, ER=9, BER=10 <sup>-10</sup> PRBS=2 <sup>7</sup> -1

**Outline Drawings (in mm):**



**PIN-OUT**



XX="01"(Bottom View)

Pin Assignment	
Number	"01"
PIN 1	Gnd
PIN 2	V <sub>cc</sub>
PIN 3	Inverted Output
PIN 4	Non-Inverted Output



***Ordering information:***

APIT155TXXBL-X-01  
PIT=PIN-TIA  
155=155Mbps  
XX=Pin-out, "01", see table  
BL=TO52 cap  
X="A", Height, 2.64mm  
01=TIA Option

***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.