

10Gbps InGaAs PIN-TIA TO-CAN

Model: APIT010GT08BLX-X



Features:

- InGaAs PIN with trans-impedance amplifier(TIA)
- High sensitivity
- Wide temperature range from-40°C to +85°C
- Suitable for 10G high speed applications

Product Specifications:

Absolute Maximum Ratings(T=25°C)

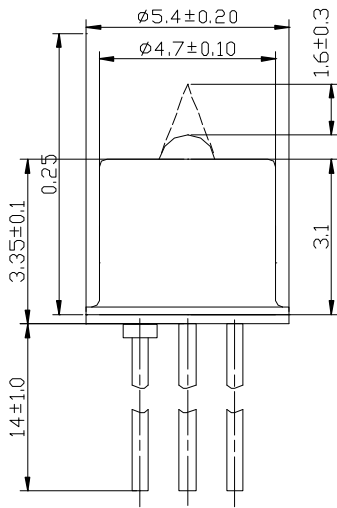
Parameter	Symbol	Unit	Min	Max	Note
Operating Temperature	T _{OP}	°C	-40	85	
Storage Temperature	T _{syg}	°C	-40	85	
Solder Reflow Temperature		°C		260	10 seconds max
Power Supply Voltage	V _P	V	0	4.5	
Optical Power	P _{in}	dBm		5	
Pin Reverse Voltage	V _r	V		20	

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

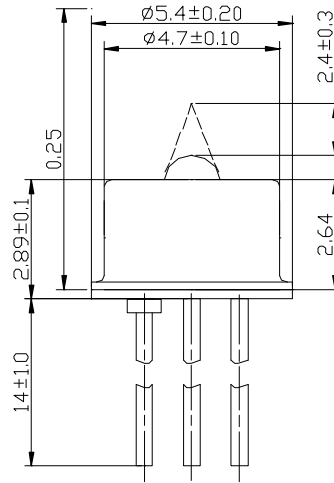
Parameter	Symbol	Unit	Min	Typ	Max	Test Condition
Supply Voltage	V _{cc}	Volts	3.0	3.3	3.6	
Supply Current	I _{cc}	mA	20	27	34	No load, V _{cc} =3.3V
Output Voltage (differential)	V _{out}	mV		250	285	λ=1310nm, P _{in} =-18dBm, R _L =100 Ω
Wavelength Range	λ	nm	1100		1650	
Saturated Optical Power	P _{sat}	dBm	0			10.3125Gb/s, λ=1310nm, ER=6dB, BER=10 ⁻¹² PRBS=2 ³¹ -1
-3dBm Bandwidth	BW	GHz	7.5			R _L = 50Ω, P _{in} =-28dBm
Sensitivity ^[1]	Sen.	dBm		-17	-16	10.3125Gb/s, λ=1310nm, ER=6dB, BER=10 ⁻¹² PRBS=2 ³¹ -1
RSSI Slope		mA/mA	0.9	1.0	1.1	

Note 1: The sensitivity test at ROSA with flex board.

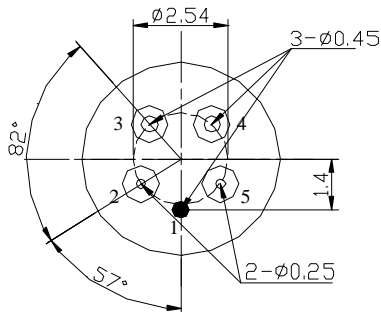
Outline Drawings (in mm):



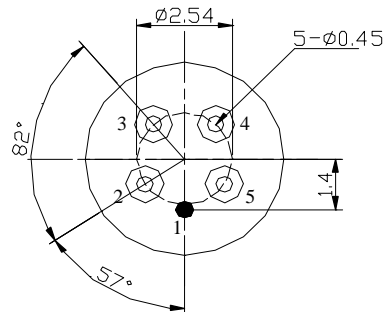
APIT010GT08BL1-X



APIT010GT08BL2-X



APIT010GT08BLX-H



APIT010GT08BLX-L

PIN-OUT

Pin Assignment	
Number	"08"
PIN 1	Gnd
PIN 2	Dout+
PIN 3	V _{cc}
PIN 4	RSSI source
PIN 5	Dout-



Ordering information:

APIT010GT08BLX-X

PIT: PIN-TIA

010G: 10Gbps

T08: Pin-out, "08", see table

BL: TO52 ball lens cap

X: "1"=3.1mm cap height;

"2"=2.64mm cap height;

-X: "-H"= 5 pin TO46 header with two 0.25mm diameter pin;

"-L"= 5 pin TO46 header with all 0.45mm diameter pin;

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.