

# 2.5 Gbps PIN-TIA Receiver Modules (3.3 V) Preliminary

# T-11-2500A-R3-SFC/ ST/ SC • T-11-2500A-P3-S/ SFC/ SSC/ SST • T-11-2500A-P3-M/ MFC/ MSC/MST



#### **Features**

- InGaAs/ InP PIN Photodiode with transimpedance amplifier
- High sensitivity with Auto Gain Control (AGC)
- Differential ended output
- Single +3.3 V operation
- -40 to +85°C operating temperature

#### **Packaging**

- FC/ ST/ SC receptacle package
- SM/ MM fiber pigtailed with optional FC/ ST/ SC connector

### **Application**

• 2.5 Gbps SDH/ SONET/ ATM receivers

Absolute Maximum Ratings (T <sub>c</sub> = 25°C)					
Parameter	Symbol	Value	Unit		
Supply Voltage	V <sub>cc</sub>	4.5	V		
Operating Temperature	T <sub>opr</sub>	-40 to +85	°C		
Storage Temperature	T <sub>stg</sub>	-40 to +85	°C		

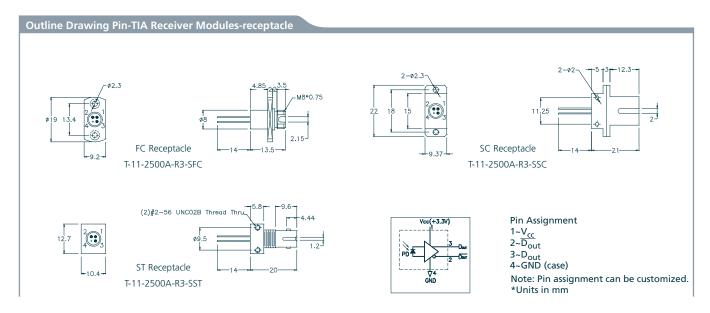
DC Electrical Characteristics (T <sub>c</sub> = 25°C)						
Parameter	Symbol	Min	Тур	Max	Unit	
Power Supply	$V_{cc}$	3	3.3	3.6	V	
Differential Output Voltage	$V_d$	-	0.6	-	V	
Supply Current (no load)	I <sub>cc</sub>	-	34	-	mA	

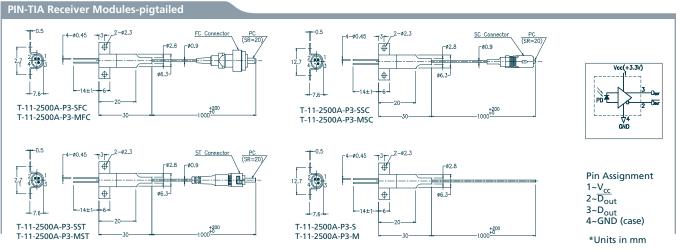
AC Optical and Electrical Characteristics (T <sub>c</sub> = 25°C)						
Parameter	Symbol	Min	Тур	Max	Unit	Test Condition
Detection Range		1100	1310	1650	nm	-
Gain @ 10 Mbps Differential	G	-	27	-	V/ mW	$\lambda = 1310 \text{ nm}$
Bandwidth	BW	1600	1800	2000	MHz	
Saturation Power	P <sub>sat</sub>	-3	0	-	dBm	λ = 1310 nm
Sensitivity	Sens	-	-21	-20	dBm	BER = 10 <sup>-10</sup> @ 2.5 Gbps
Output Resistance	R <sub>out</sub>	48	60	72	ohm	

(Operating at  $\rm V_{cc}$  = 3.3 V,  $\rm T_c$  = 25°C,  $\lambda$  = 1310 nm, 9/125  $\mu m$  SM fiber)

Connector Options			
Model	Package	Fiber	Connector
T-11-2500A-R3-SFC	Receptacle		FC
T-11-2500A-R3-SST		-	ST
T-11-2500A-R3-SSC			SC
T-11-2500A-P3-S(M)FC			FC
T-11-2500A-P3-S(M)ST	Pigtailed	SM, MM	ST
T-11-2500A-P3-S(M)SC		Jivi, IVIIVI	SC
T-112500A-P3-S(M)			-

## T-11-2500A-R3-SFC/ ST/ SC • T-11-2500A-P3-S/ SFC/ SSC/ SST • T-11-2500A-P3-M/ MFC/ MSC/MST





# Warnings

Handling Precautions: This device is susceptible to damage as a result of electrostatic discharge (ESD). A static free environment is highly recommended. Follow guidelines according to proper ESD procedures.

#### **Legal Notice**

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