



## TOSA-LC 10Gbps 1310nm DFB

### Features:

- Low threshold current
- High bandwidth
- Operating temperature range  $T_C = -40$  to  $+85^\circ\text{C}$
- With optical isolator

### Applications:

- 10G Gigabit Ethernet
- 10G Fiber Channel

### Specifications:

#### Absolute Maximum Ratings:

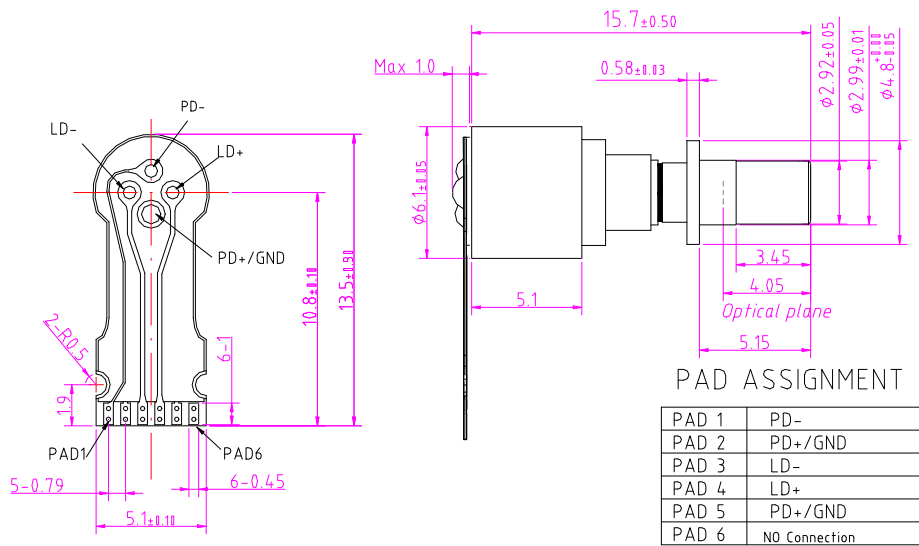
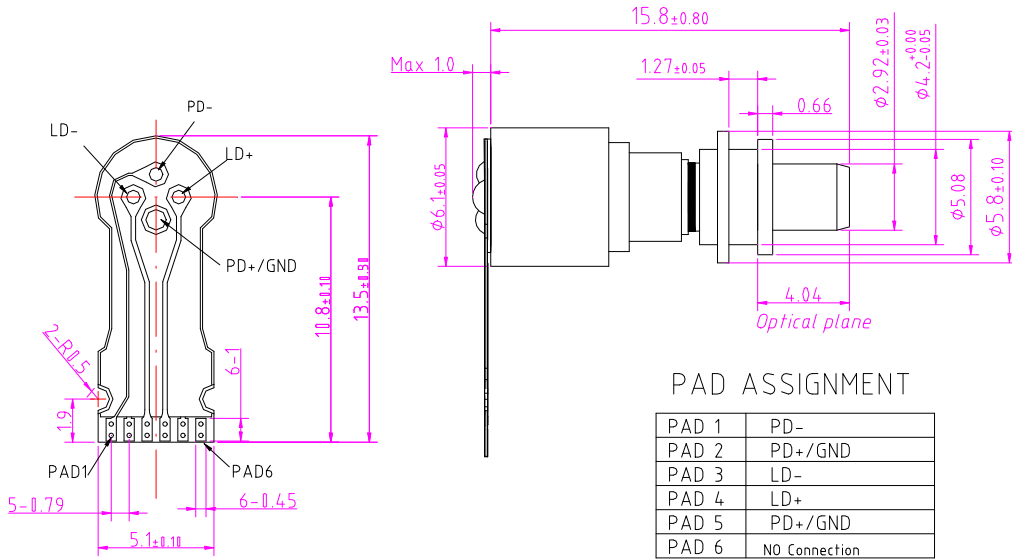
Parameter	Symbol	Min	Max.	Unit
LD Reverse Voltage	$V_{r(LD)}$	--	2	V
LD Forward Current	$I_{f(LD)}$	--	120	mA
PD Forward Current	$I_{f(PD)}$	--	10	mA
PD Reverse Voltage	$V_{r(PD)}$	--	20	V
Operating Temperature	Top	-40	85	$^\circ\text{C}$
Storage Temperature	Tstg	-40	95	$^\circ\text{C}$
Lead Solder Temperature	--	--	260	$^\circ\text{C}$
Lead Soldering Time	--	--	10	s

#### Electro-Optical Characteristics:

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Threshold Current	Ith	--	--	--	12	mA
Forward Voltage	Vf	$I_{op}=I_{th}+20\text{mA}$	--	1.3	1.6	V
Monitor Current(MPD)	Im	$I_{op}=I_{th}+20\text{mA}$	100	--	1000	$\mu\text{A}$
Dark Current(MPD)	Id	$V_r=5\text{V}$	--	--	100	nA
Optical Output Power	Po	$I_{op}=I_{th}+20\text{mA}$	0.45	--	0.75	mW
Slope efficiency	SE	$I_{op}=I_{th}+20\text{mA}$	0.0225	--	0.0375	mW/mA
Central Wavelength	$\lambda_c$	$I_{op}=I_{th}+20\text{mA}$	1300	1310	1320	nm
Spectral Width , -20dB	$\Delta\lambda$	$I_{op}=I_{th}+20\text{mA}$	--	--	1	nm
Side-mode suppression Ratio	SMSR	$I_{op}=I_{th}+20\text{mA}$	30	--	--	dB
Rise/Fall Tim(20~80%)	Tr/Tf	--	--	--	45	ps
Tracking Error	TE	$-40^\circ\text{C}\sim 85^\circ\text{C}$	-1.5	--	+1.5	dB



### Mechanical Dimension and Pin Assignment:



### Order Information:

SAN-U P/N: **402 105 XX00**

Product Type  
402: TOSA

Wavelength  
105: 1310nm

Serial Number  
5800  
6300



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**Statement:**

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