



变更履历表

版本	变更前内容	变更后内容	编制	审核	变更日期
01	初版	--	江虹	邱名武	2018.12.19
02	修订 B 值 4050	3930	江虹	邱名武	2019.11.22



2.5G 1567.95nm DFB LD TO-CAN with TEC

Features:

- Low threshold current
- High output power
- Ultra small form-factor 8-pin TO package with aspherical lens
- Very low TEC power consumption

Specifications:

Absolute Maximum Ratings

Parameter	Symbol	Min	Max.	Unit
LD Reverse Voltage	$V_{r(LD)}$	--	2	V
LD Forward Current	$I_{f(LD)}$	--	150	mA
Operating Temperature	Top	-5	70	°C
Storage Temperature	Tstg	-40	100	°C
Lead Solder Temperature	--	--	260	°C
Lead Soldering Time	--	--	10	s

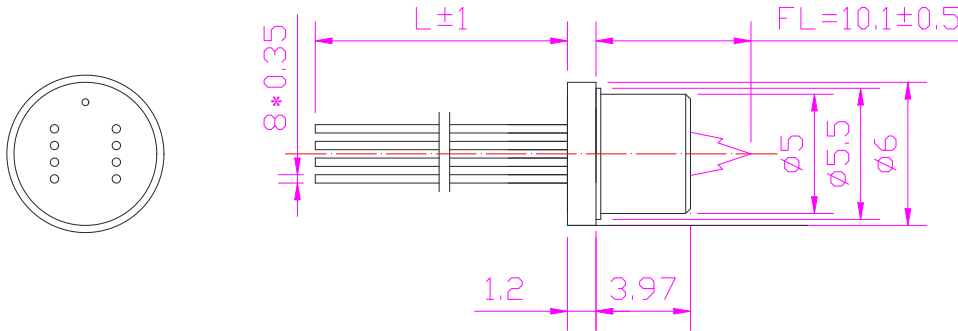
Transmitter Optical& Electrical Characteristics (T=25°C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Operating Temperature	Top	@1567.95nm	30	--	55	°C
Threshold Current	Ith	25°C	--	6	15	mA
		70°C	--	25	40	mA
Forward Voltage	Vf	Iop=Ith+20mA	--	1.1	1.6	V
Monitor Current(MPD)	Im	Iop=Ith+20mA	100	--	1000	uA
Dark Current(MPD)	Id	Vr=5V	--	--	200	nA
Optical Output Power	Po	Iop=Ith+20mA	5	6	--	mW
Slope efficiency	SE	Iop=Ith+20mA	0.25	0.30	--	mW/mA
Central Wavelength	λ_c	Iop=Ith+20mA	1566	1567	1568	nm
Spectral Width , -20dB	$\Delta\lambda$	Iop=Ith+20mA	--	0.1	1	nm
Wavelength temperature coefficient	$\Delta\lambda/\Delta T$		--	0.09	0.13	Nm/°C
Side-mode suppression Ratio	SMSR	Iop=Ith+20mA	35	40	--	dB
Rise Time/Fall Time	Tr/Tf	20~80%;	--	--	100	ps
Tracking Error	TE	-5°C~70°C	-1.5	--	+1.5	dB
Thermistor						
Thermistor Resistance	Rth	25°C	9.5	10	10.5	K Ω
B constant of Rth	B	--	--	3930	--	K



Thermoelectric(TEC)						
TEC Voltage	$V_{(TEC)}$	--	--	--	1.2	V
TEC Current	$I_{(TEC)}$	--	--	--	0.9	A

Outline Dimension and PIN Definitions



There are two options for pin length(L): 14mm or 17mm.

Type A

Pin No.	Standard
1	TEC+
2	Thermistor+
3	PD-
4	PD+
5	LD-
6	LD+
7	Thermistor-
8	TEC-

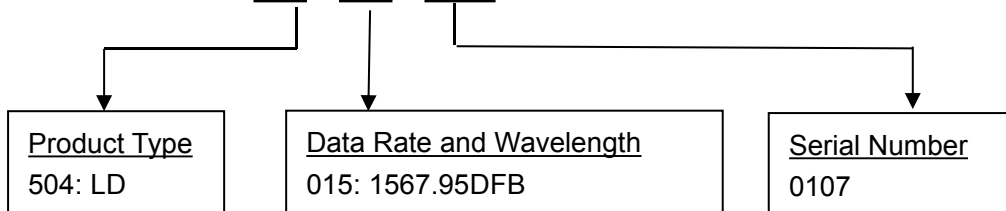
Type B

Pin No.	Standard
1	TEC-
2	Thermistor+
3	LD+
4	PD+
5	PD-
6	LD-
7	Thermistor-
8	TEC+

There are two options for pin assignment: Type A or Type B.

Order Information:

SAN-U P/N: **504** · **015** · **0107**





Statement:

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