NLK1U5EAAA

1625-1670 nm DFB laser diode in a butterfly-type 14 pin package with thermo-electric cooler.
Pigtail fiber is connectorized with an FC/PC connector.

FEATURES
* Wavelength Range   1625 - 1670 nm, ITU-T grid wavelength
* Fiber Output Power   10mW

ABSOLUTE MAXIMUM RATINGS(T_{sub}=25deg.C)

Parameter	Symbol	Ratings	Units
Laser diode reverse voltage	V_R	2.0	V
Laser diode forward current	I_F	225	mA
Operating case temperature	T_{case}	-5 to 70	deg.
Storage temperature	T_{stg}	-40 to 85	deg.
Photodiode reverse voltage	V_{DR}	10	V
Photodiode forward current	I_{DF}	10	mA
Peltier current	I_P	1.4	A

ELECTRICAL/OPTICAL CHARACTERISTICS(T_{sub}=25deg.C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Forward voltage	V_F	I_F=30mA		1.2	1.6	V
Threshold current	$I_{(TH)}$	CW		15	20	mA
Fiber output power	ϕ_e	CW,I_F=100mA	10			mW
Peak wavelength	λ_p	CW,ϕ_e=10mW	-1	ITU-T	+1	nm
Spectral linewidth[*]	$\Delta\nu$	CW,ϕ_e=10mW		2		MHz
Side mode suppression ratio	SMS	CW,ϕ_e=10mW	35			dB
Monitoring Current(PD)	$I_{R(E)}$	CW,ϕ_e=10mW	0.1			mA
Dark current(PD)	$I_{r(0)}$	CW,V_{DR}=5V			100	nA
Tracking error	E_R	$I_{R(E)}$=constant	-0.5		+0.5	dB
Cooling capacity[*]	ΔT_{PE}	ϕ_e=10mW,T_{case}=70deg	45			deg.
Peltier current	I_{PE}	T_{case}=-5 to 70deg.			1	A
Peltier voltage	V_{PE}	T_{case}=-5 to 70deg.			2	V
Thermister resistance[*]	R	T_{sub}=25deg.		10		$k\Omega$
Isolation[*]	I_s	T_{sub}=25deg.		30		dB

$\Delta T=| T_{case}-T_{sub} |$

[*] Data is not attached.

⚠️ **WARNING**

If you plan to use these pruducts in equipment which could endanger lives in the event of a product failure, please consult an NEL engineer before usage. Improper application of these products may endanger life. To avoid possible injury, make certain these products are used in a redundent configuration.

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1 These products are subject to export regulations and restricitons set force by the Japanese Government.
2 NTT Electronics Corporation reserves the right to make changes in design,specification or related information at any time without prior notice.
3 The characteristics which are not specified in the data sheet are not guaranteed.
4 The characteristics under the different operation conditions from the ones specified in the data sheet are not guara