

Optical and Electrical Characteristics

$T_o = 25^\circ \text{C}$ unless otherwise stated

Parameter	Symbol	Unit	Value	Notes
Maximum data bit rate	G	Gbit/s	~40	
Operating wavelength	λ_{op}	nm	850±15	$I_F = 6 \text{ mA}$
Threshold current	I_{th}	mA	<0.5	
Slope efficiency	η	W/A	>0.5	
Operating voltage	V_{op}	V	2.5	$I_F = 6 \text{ mA}$
Optical output power	P	mW	>2.5	$I_F = 6 \text{ mA}$
Differential resistance	R_s	Ω	<100	$I_F = 6 \text{ mA}$
-3dB modulation bandwidth	f_{3dB}	GHz	~20	$T_o = 20 - 85^\circ \text{C}$
Rise / Fall time	t_R	ps	<20	20%-80%
Modulation current efficiency factor	MCEF	GHz/mA ^{1/2}	~9	$T_o = 20 - 85^\circ \text{C}$
Wavelength temperature coefficient	$d\lambda/dT$	nm/°C	0.06	$T_o = 20 - 85^\circ \text{C}$
Thermal resistance	R_{th}	°C/mW	<3.5	
RMS spectral width	$\Delta\lambda$	nm	<0.7	$I_F = 6 \text{ mA}$

T_o - operating temperature; I_F - operating current