

1030nm SOA

Model 2a: 1030nm / PM singlemode fiber / Butterfly package

Reference: SOA-2a-0-0

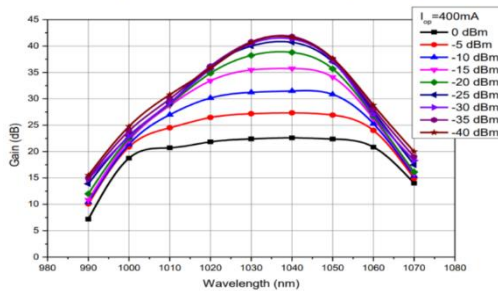
SPECIFICATIONS	Unit	Min	Typ	Maximum
Amplification/Modulation Wavelength	nm	1020	1035	1050
Operating Current (CW mode)	mA		450	500
Operating Current (Pulse mode*)	mA		900	1000
Output Power (CW mode)	mW/dBm		160/22	
Output Power (Pulse mode*)	mW/dBm		300/24.5	
Input Power**	dBm			5
Operating Voltage	V		1.6	1.9
Small signal gain (@ 500mA)	dB	34	37	
Gain Ripple (RMS) @ I _{op} -CW	dB		0.06	0.3
Extinction Ratio (Pin = -25/-5dBm)	dB	50	75	
Noise Figure (NF)	dB		8	
TEC current	A			3
TEC voltage	V			4
Internal thermistor (25°C) - (Beta=3435K)	kOhm		10	
Fiber type / Buffer	-	PM980 / 250μm		
Connectors	-	FC/APC		
Fiber bend radius	cm	3		
Storage temperature	°C	-40		85
Operating case temperature	°C	0		70
Operating chip temperature	°C	15	25	45
Laser diode reverse voltage	V			2
Soldering temperature/time	°C/s			300/10

*With AeroDIODE pulsed drivers only and input power limited <5 dBm

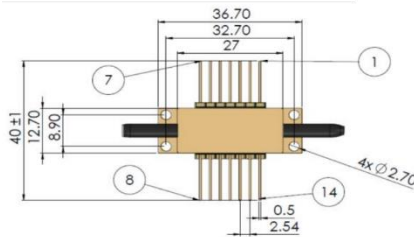
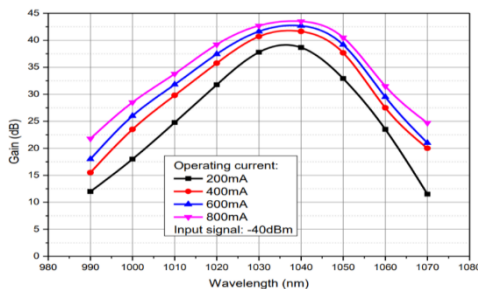
**Even for use in modulation mode, it is recommended to use the product with low input power and high gain.

Form factor and SOA pinning:

Gain spectra at different input signals



Gain spectra at different currents



#	Pin identification	#	Pin identification
1	TEC "+"	8	-
2	Thermistor	9	-
3	-	10	SOA anode "+"
4	-	11	SOA cathode "-"
5	Thermistor	12	-
6	-	13	Case
7	-	14	TEC "-"

Gain and Output power vs. Input signal

