

# 1310 nm SOA

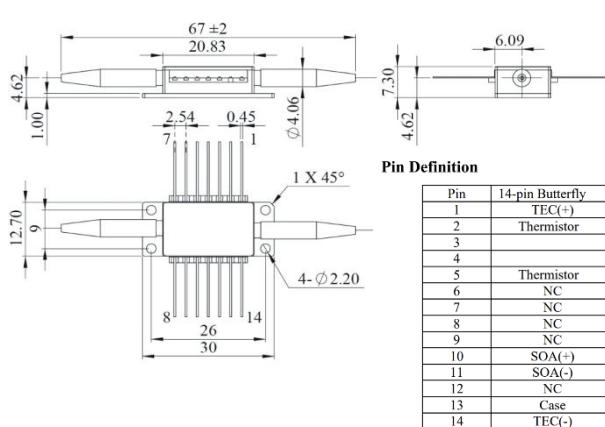
Model 3a : 1310nm – PM single mode fiber – Butterfly package

Reference: SOA-3a-0-0

SPECIFICATIONS	Unit	Min	Typ	Maximum
Amplification/Modulation Wavelength Range	nm	1270	1310	1330
Operating Current (CW mode)	mA	-	700	750
Operating Current (Pulse mode*)	mA	-	1000	1200
Max Output power (1310 nm - CW mode)	dBm   mW	-	18   65	-
Max Output power (1310 nm - Pulse mode*)	dBm   mW	-	20   100	-
Maximum Input Power	dBm	-	-	5
Operating Voltage	V	-	1.7	-
ASE Optical 3 dB Bandwidth	nm	50	60	-
Small Signal Gain (Pin = -25 dBm/3 μW)	dB	28	30	-
Gain Ripple (RMS) @ IopCW	dB	-	0.1	-
Extinction Ratio (Pin = -25 dBm)	dB	50	75	-
Noise Figure (NF)	dB	-	-	7.5
TEC Current (25°C/case@65°C)	A	-	-	1.5
TEC Voltage (25°C/case@65°C)	V	-	-	3.6
Internal Thermistor (25°C) – (Beta = 3375 K)	kOhm	9.5	10.0	10.5
Fiber Type (eq)	/	Panda PM1310 or equivalent		
Fiber Coating	μm	900μm		
Connectors	/	FC/APC		
Fiber Bend Radius	kgf	-	-	1
Storage Temperature	°C	-40	-	+85
Operating Case Temperature	°C	-20	-	+70
Operating Chip Temperature	°C	+15	-	+45
Laser Diode Reverse Voltage	V	-	-	2
Soldering Temperature   Time	°C   S	-	-	260   10

\*With AeroDIODE pulsed drivers only- permanent damage may occur otherwise.

Form factor, SOA pinning and typical performances:



Typical spectrum of a 1310 nm DFB laser diode amplified in pulsed mode (OSA resolution 0.05 nm).

**AERODIODE** - Institut d'optique d'Aquitaine - Rue François Mitterrand

33400 Talence - France - Tél. : +33 (0)6 27 69 41 52

contact.aerodiode@aerodiode.com - [www.aerodiode.com](http://www.aerodiode.com)

SIRET 880 329 636 00018 - N° TVA intracommunautaire : FR 87880329636