

785 nm SOA

Model 1a: 780-795 nm / PM singlemode fiber / Butterfly package

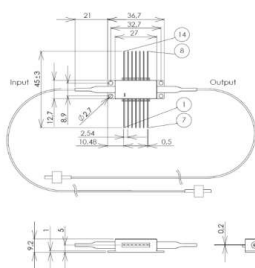
Reference: SOA-1a-0-0

SPECIFICATIONS	Unit	Min	Typ	Maximum
Amplification/Modulation Wavelength	nm	750	780	795
Operating Current (CW mode)	mA		250	400
Operating Current (Pulse mode*)	mA		600	800
Max output power (775 nm-CW mode)	mW/dBm		65/18	
Max output power (775 nm-Pulse mode*)	mW/dBm		160/22	
Max Input power	mW/dBm			3/5
Operating Voltage	V		2.0	
Small signal gain (Pin = -25 dBm)	dB	28	32	
Gain Ripple (RMS) @ Iopcw	dB		0.03	0.2
Extinction ratio (Pin = -25 dBm)	dB	50	75	
Noise Figure (NF)	dB		6.5	
TEC current (25°/case@65°)	A			1.0
TEC voltage (25°/case@65°)	V			2.0
Internal thermistor (25°)	kOhm	9.5	10.0	10.5
Fiber type (eq)	-	Panda PM780		
Fiber coating	μm	250 μm		
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 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.

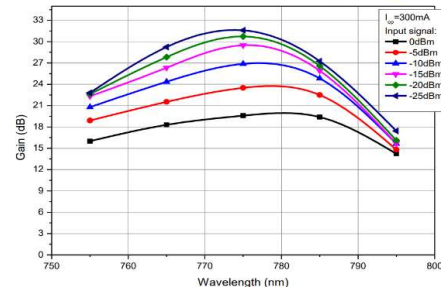
Form factor & SOA pinning:



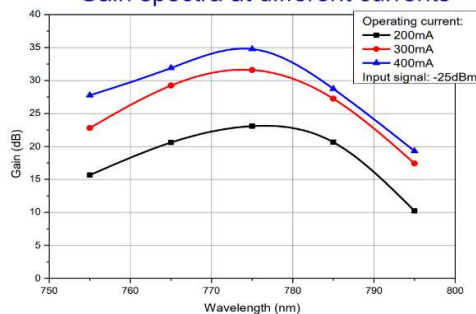
Pin identification:

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

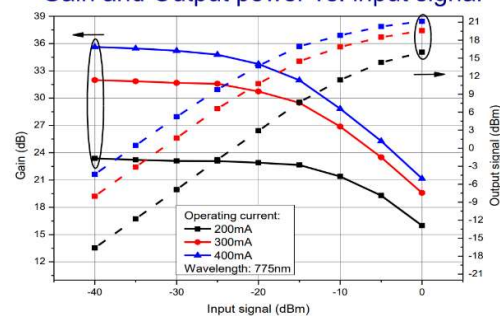
Gain spectra at different input signals



Gain spectra at different currents



Gain and Output power vs. input signal



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