Features:
- fiber-to-fiber optical gain of up to 30 dB
- output power of up to 15 dBm
- -3 dB optical gain bandwidth of up to 35 nm

Package: Butterfly (DBUT)

Additional & customized:
- PM fiber pigtails
- FC/APC terminated pigtails

Specifications
(nominal stabilization temperature +25 °C)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward current, mA</td>
<td>-</td>
<td>-</td>
<td>300</td>
</tr>
<tr>
<td>Forward voltage, V</td>
<td>-</td>
<td>-</td>
<td>2.3</td>
</tr>
<tr>
<td>Output optical power, dBm</td>
<td>-</td>
<td>-</td>
<td>15.0</td>
</tr>
<tr>
<td>Central wavelength λc, nm</td>
<td>-</td>
<td>1060</td>
<td>-</td>
</tr>
<tr>
<td>-3 dB optical gain bandwidth, nm</td>
<td>-</td>
<td>35</td>
<td>-</td>
</tr>
<tr>
<td>Gain ripple, dB</td>
<td>-</td>
<td>&lt; 0.1</td>
<td>-</td>
</tr>
<tr>
<td>Small signal gain, dB</td>
<td>-</td>
<td>30</td>
<td>-</td>
</tr>
<tr>
<td>Polarization dependent gain, dB</td>
<td>-</td>
<td>&gt;10</td>
<td>-</td>
</tr>
</tbody>
</table>

The following part numbers should be used when ordering:

SOA-532-(a)-(b),
where:
(a) – package type (DBUT),
(b) – fiber type (SM or PM).

Example: SOA-532-DBUT-SM.

All specifications are subject to change without notice.
Performance examples (continued)

POWER BOOSTER PERFORMANCE EXAMPLES
Output spectra at $P_{\text{input}} = 2.0\,\text{mW}$, spectral $\text{FWHM}_{\text{input}} = 0.08\,\text{nm}$

![Graph showing output spectra for different wavelengths and input conditions.](image)

- **Wavelength (nm)**: 1040, 1060, 1080, 1100
- **Spectral density (dBm/nm)**: -30, -20, -10, 0, 10, 20, 30, 40, 50
- **Input wavelengths**: 1045nm, 1060nm, 1075nm
- **Amplified signal**
- **ASE excess**
- **ASE**

Forward current and ASE excess
at $P_{\text{in}} = 2\,\text{mW}$, $P_{\text{out}} = 30\,\text{mW}$ (G~12dB)

![Graph showing forward current and ASE excess vs. wavelength.](image)

- **Wavelength (nm)**: 1020, 1040, 1060, 1080, 1100
- **ASE excess (dB)**: -20, -10, 0, 10, 20, 30, 40, 50
- **Signal/ASE ratio**
- **Input wavelengths**: 1020nm, 1040nm, 1060nm, 1080nm, 1100nm
- **ISOA (mA)**: 10, 15, 20, 25, 30

Signal/ASE ratio
at $P_{\text{in}} = 2\,\text{mW}$, $P_{\text{out}} = 30\,\text{mW}$ (G~12dB)

![Graph showing signal/ASE ratio vs. wavelength.](image)

- **Wavelength (nm)**: 1020, 1040, 1060, 1080, 1100
- **Signal power/ASE power (dB)**: 10, 15, 20, 25, 30
- **ISOA (mA)**: 10, 15, 20, 25, 30