













coupling loss variation of this converter are less than 1.0 dB at the wavelength range of 1520 ~1640 nm. 1-dB bandwidth is more than 120 nm for both TE and TM modes. The alignment tolerance for 1-dB excess loss is  $\sim \pm 2.8 \mu\text{m}$  in horizontal direction and  $\sim \pm 2.1 \mu\text{m}$  in vertical direction for both TE and TM modes.

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