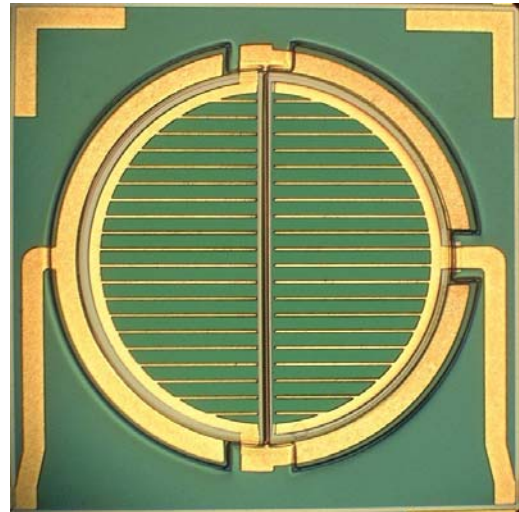


### 043580: 2V Power-by-Fiber GaAs Power Converter

#### Features

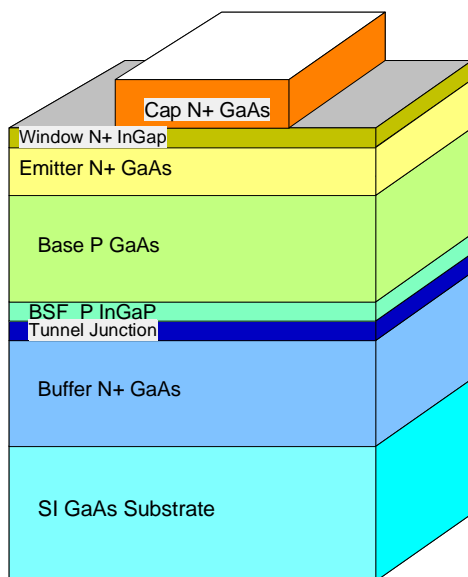
- ◆ Monolithic Power-by-Fiber GaAs Power Converter consisting of two cells in series
- ◆ 1.5mm diameter active area for easy alignment
- ◆ Available in die form or packaged in TO packages with FC,ST, SMA connectors or alternatives
- ◆ Single and multimode fiber compatible
- ◆ Over 1W of input power possible
- ◆ Nominal 30-35% conversion efficiency over variety of input levels
- ◆  $V_{mp} > 1.9V$  compatible with DC/DC converters
- ◆ Higher voltage design capability
- ◆ Low production cost

#### Sample Device Die



2V Power-by-Fiber converter micrograph. Connection pads are compatible with ribbon and wire bonding or soldering

#### Power By Fiber N/P Device Structure



Power-By-Fiber N/P Epitaxial basic device structure fabricated on semi-isolating GaAs substrate.

#### Applications

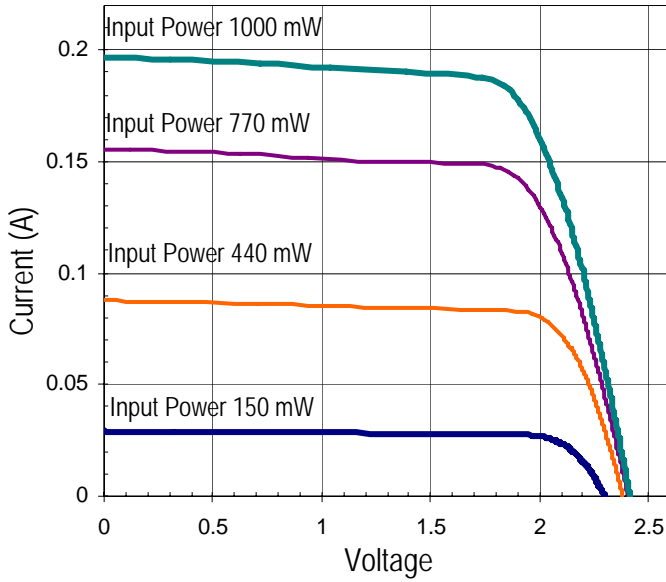
- ◆ Remote sensing requiring very high isolation
- ◆ RF shielded power

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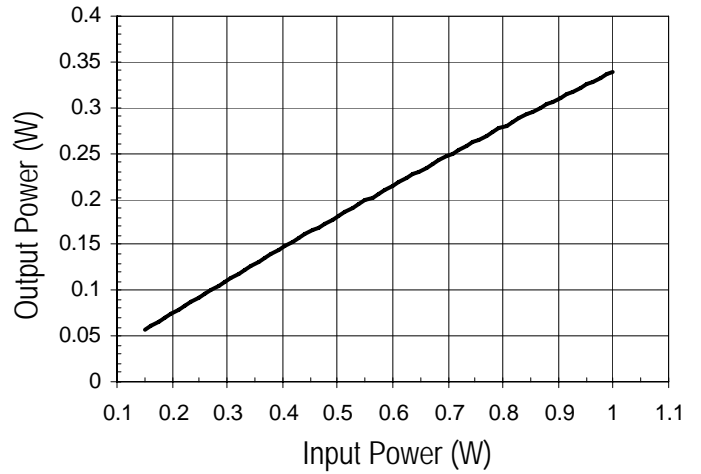
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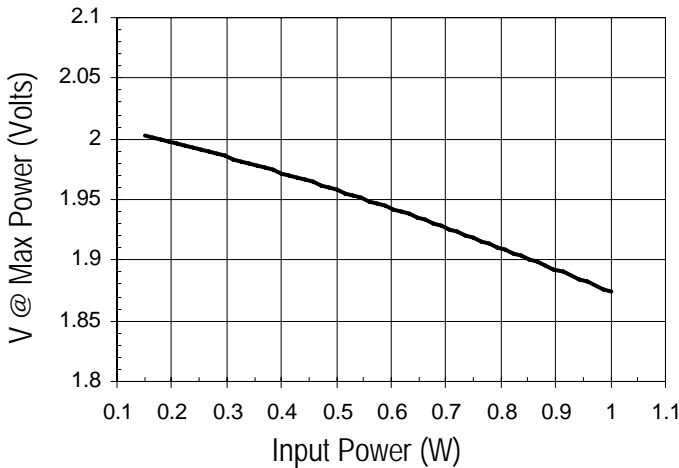
### IV Characteristics vs. Input Power



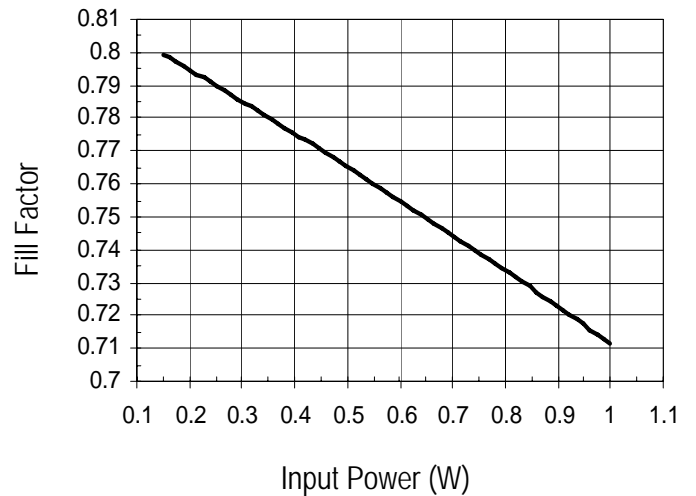
### Power Output vs. Input Power



### Max Power Voltage vs. Input Power



### Device Fill Factor vs. Input Power



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The information contained on this sheet is for reference only. Actual specifications for delivered products may vary. 04/05/06