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## General Description:

## | Advanced Optical Solutions |

Beam Transformation System (BTS) for diode laser bars with up to 50 emitters: emitter size up to 100  $\mu\text{m}$ , pitch 200  $\mu\text{m}$ . The BTS is used to make the beam parameter product of diode laser bars symmetrical for free beam lasers or fiber coupling.

The BTS consists of a FAC160 fast axis collimation lens, a diagonal lens array for rotating the beams by 90° and a bottom tab for mounting.

### Specification Data

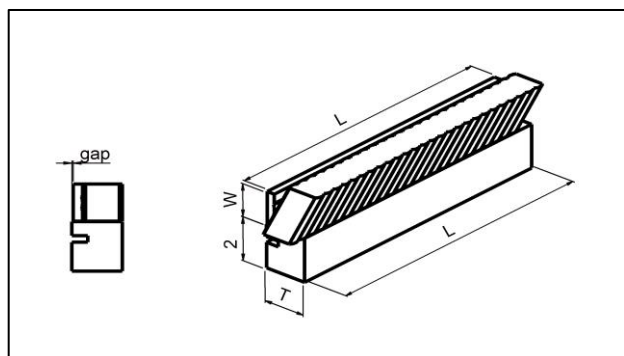
|  | Unit            | Value                    |
|--|-----------------|--------------------------|
| Material   |                 | S-NPH3 / S-TIH53 (Ohara) |
| Length (L)   | mm              | 12 $\pm$ 0.1             |
| Width (W)  | mm              | 0.8                      |
| Thickness (T)  | mm              | 1.5 $\pm$ 0.1            |
| Clear aperture   | mm <sup>2</sup> | 10.0 x 0.25              |
| Surface quality @ 633 nm                                 |                 | $\lambda/4$ (typically)  |
| Back focal length BFL @ 980 nm                           | mm              | 0.034                    |
| Pitch  | mm              | 0.2                      |
| Gap  | mm              | 0.0 $\pm$ 0.01           |
| Numerical aperture (NA)                                  |                 | FA: 0.5 SA: 0.09         |
| Transmission   | %               | > 98                     |
| Remaining divergence (FW1/e <sup>2</sup> ) for fast axis | mrad            | < 12                     |

### Product Codes

| AR-coating           | Product code | Note                            |
|----------------------|--------------|---------------------------------|
| 600 - 700 nm, R<0.5% | MOD000674    | Divergence measured at 808 nm   |
| 790 - 990 nm, R<0.5% | MOD000681    | Divergence optimized for 808 nm |
| 790 - 990 nm, R<0.5% | MOD000682    | Divergence optimized for 976 nm |

### Options

Customized coating



**RoHS compliant**  
2002/95/EG

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