

## PRODUCT SPECIFICATION

### 22 W 975 nm HIGH POWER SINGLE EMITTER BARE BAR

## PRODUCT OVERVIEW

Emitter Type: Multimode single emitter bare bar

Emitters per Bar: 30

Nominal Output Power (assembled): 22 W

Wavelength Class: 975 nm

Emitter Width: 190  $\mu$ m

Chip Width: 400  $\mu$ m

Delivery Format: Bare bar, shipped on grip ring

Manufactured: 2021-6

Country of Origin: Switzerland

## ELECTRO-OPTICAL CHARACTERISTICS

### TARGET SPECIFICATION ON ASSEMBLY (CHIP ON SUBMOUNT)

Threshold Current ( $I_{th}$ )

Typical: 1000 mA

Maximum: 1200 mA

Condition: 25 °C

Operating Power ( $P_{op}$ )

Minimum: 18 W

Maximum 22 W

Condition: 20 A, 25 °C

Operating Current ( $I_{op}$ )

Typical: 20 A

Maximum: 22 A

Condition: 25 °C

Operating Voltage ( $V_{op}$ )

Typical: 1.5 V

Maximum: 1.6 V

Condition: 20 A, 25 °C

Wavelength Center ( $\lambda_c$ )

Minimum: 959 nm

Maximum: 964 nm

Condition: 2 A, 25 °C

Lateral Far Field, 95% PIB ( $\Theta_{LFF}$ )

Typical: 9.5 deg

Maximum: 10.5 deg

Condition: 20 A, 25 °C

Vertical Far Field, 95% PIB ( $\Theta_{VFF}$ )

Minimum: 50 deg

Typical: 54 deg

Maximum: 60 deg

Condition: 20 A, 25 °C

Polarisation Ratio TE/(TM+TE) (PR)

Minimum: 0.95

Typical: 0.98

Condition: 20 A, 25 °C

Note: All electro-optical values depend on mounting technology and operating conditions.

## **BARE BAR LEVEL ELECTRO-OPTICAL TARGET REFERENCE ONLY**

Threshold Current ( $I_{th}$ )

Maximum: 1200 mA

Condition: 25 °C

Operating Power ( $P_{op}$ )

Minimum: 700 mW

Condition: 2.0 A, 25 °C

Slope Efficiency ( $\eta_d$ )

Typical: 0.7 W/A

Condition: 25 °C

Wavelength Center ( $\lambda_c$ )

Minimum: 958.5 nm

Maximum: 962.5 nm

Condition: 50 mW, 25 °C

## **MECHANICAL DIMENSIONS**

Total Bar Width

Typical: 13.4 mm

Cavity Length

Typical: 4.2 mm

Bar Thickness

Typical: 150  $\mu$ m

AR/HR Thickness Variation

Maximum: 5  $\mu$ m

Chip Width

Typical: 400  $\mu$ m

Emitter Width

Typical: 190  $\mu$ m

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Hong Kong

Chips per Bar

Typical: 30

## **DELIVERY INFORMATION**

Packaging: Tape in grip ring

**Request full specification from [support@gehtmarketplace.com](mailto:support@gehtmarketplace.com)**

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