

## 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  $\mu\text{m}$   
Chip Width: 400  $\mu\text{m}$   
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 ( $I_{\text{th}}$ )  
Typical: 1000 mA  
Maximum: 1200 mA  
Condition: 25 °C

Operating Power ( $P_{\text{op}}$ )  
Minimum: 18 W  
Maximum 22 W  
Condition: 20 A, 25 °C

Operating Current ( $I_{\text{op}}$ )  
Typical: 20 A  
Maximum: 22 A  
Condition: 25 °C

Operating Voltage ( $V_{\text{op}}$ )  
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 ( $\Theta_{\text{LFF}}$ )  
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

Chips per Bar  
Typical: 30

**DELIVERY INFORMATION**

Packaging: Tape in grip ring

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