

# Tapered Amplifier

GaAs Semiconductor Laser Diode



## Absolute Maximum Ratings

	Symbol	Unit	min	typ	max
Operational Temperature at case	$T_C$	$^{\circ}\text{C}$			50
Forward Current	$I_F$	A			3
Reverse Voltage	$V_R$	V			0

Stress in excess of the Absolute Maximum Ratings can cause permanent damage to the device. Operation at the Absolute Maximum Rating for extended periods of time can adversely affect the device reliability and may lead to reduced operational life.



## Recommended Operation Conditions

	Symbol	Unit	min	typ	max
Operational Temperature at case	$T_{\text{case}}$	$^{\circ}\text{C}$	0		40
Forward Current	$I_F$	A			2,5

## Characteristics at $T_{\text{amb}} 25^{\circ}\text{C}$

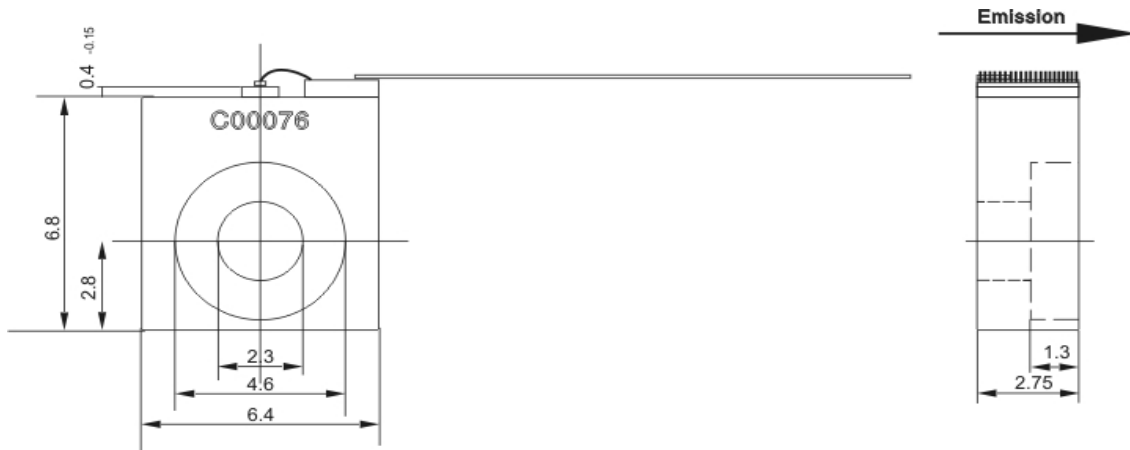
Parameter	Symbol	Unit	min	typ	max	Measurement Condition
Center Wavelength	$\lambda_C$	nm	770	780	785	
Gain Width (FWHM)	$\Delta\lambda$	nm	10	20		
Temp. Coeff. of Wavelength	$TC_{\lambda}$	nm / K		0,25		
Output Power	$P_{\text{opt}}$	mW		1000		depending on customer setup
Amplification		dB		13		
Saturation Power	$P_{\text{Sat}}$	mW		50		
Operational Current	$I_{\text{Op}}$	A		2,5		
Cavity Length	$l_C$	$\mu\text{m}$		2750		
Input aperture (at rear side)		$\mu\text{m}$		3		
Output Aperture (at front side)		$\mu\text{m}$		190		
Divergence parallel (FWHM)	$\Theta_{  }$	$^{\circ}$	7	10	13	
Divergence perpendicular ( $1/e^2$ )	$\Theta_{\perp}$	$^{\circ}$		28		
Astigmatism		$\mu\text{m}$	325	375	425	depending on customer setup
Polarization				TM		

## Package Information

	Part No.	
c-Mount 2.75 mm	CMT03	available (see image)
others		on request

### Package Dimensions

	CMT03		
Emission plane		mm	7.2 -0.15
C-Mount Thickness		mm	2.75



### Package Pinout

	CMT0n	
Cathode (-)		Mounting wire
Anode (+)		Housing

