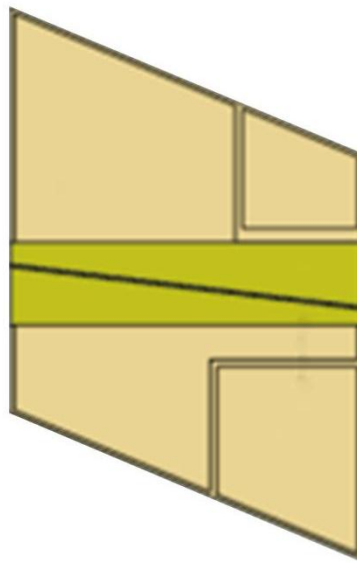


1650nm SOA COC Chip



- **Product Description**

C band SOA chip, 2500um, ridge waveguide

- **Product features**

Carrier chip、 High gain, high saturation power、 High pulse modulation speed、 Polarization dependence

● Part Number

MP-SOA-1650-30db-25-CoC

● Application area

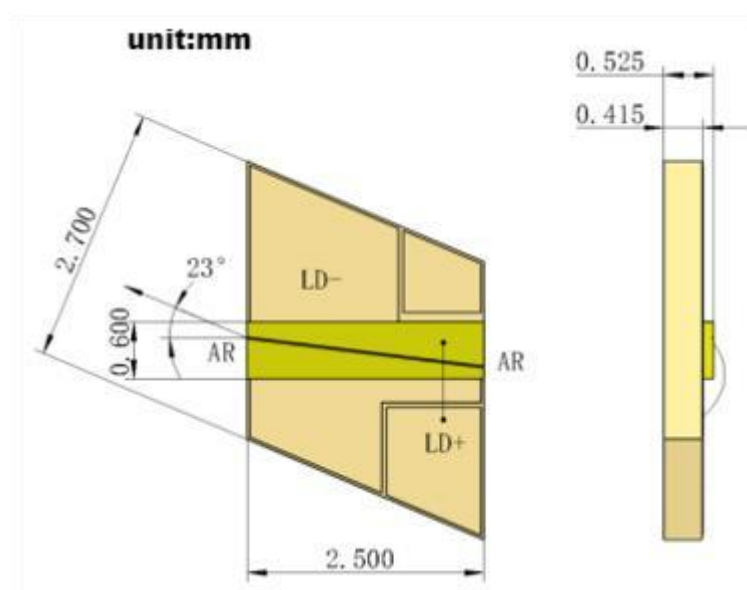
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● Core parameters

Center wavelength
1650nm

● Dimension Drawing



● General Parameters

Main Parameters:

Parameters	Unit	Min	Typ	Max	Condition
Working wavelength	nm	1525		1572	C band
	nm	1572		1622	L band
	nm	1622		1672	U band
Small Signal Gain	dB	30			$I_f=500\text{mA}, P_{in}=-15\text{dBm}$
					$T_{op}=30^\circ\text{C},$
Wavelength-dependent gain	dB			1	$I_f=500\text{mA}, P_{in}=0\text{dBm},$
					$T_{op}=30^\circ\text{C}$
Max. Output optical power	dBm	19			$P_{in}=0\text{dBm}, I_f=500\text{mA},$
					$T_{op}=30^\circ\text{C},$
					Integrated power
Saturated output power	dBm		16		3dB down, $I_f=800\text{mA}$
Noise Index	dB		4.5	6	$I_f=300\text{mA},$
					$P_{in}=-10\text{dBm } T_{op}=30^\circ\text{C},$ TE module input
Fall/Rise time	ns			1	10%~90%
Forward voltage	V		1.5	1.8	$I_f=I_{OP}$

Series resistance	Ohms			9	Bar, slope 50mA 100mA
light entrance end NA	Deg.		23		
Chip spot diameter	um		4.5	5	
X Directional light divergence angle	Deg.		23	30	FWHM, $I_f=I_{OP}$
Y Directional light divergence angle	Deg.		23	30	FWHM, $I_f=I_{OP}$

Environment

Parameters	Unit	Min	Typ	Max	Condition
Operating temperature	°C	10	30	40	Top
Packaging		Sealed, nitrogen filled			
Storage temperature	°C	-40		85	
Short-term storage humidity	%			50	
Long-term storage		It is recommended to store in nitrogen or vacuum			

Appendix 1: Model and Part Number Comparison Table

Part Number	Title	Operating Wavelength	Small Signal Gain	Max. Output Power
MP-SOA-1550-30db-25-CoC	1550nm SOA COC Chip	1550±25nm	30dB	19dbm
MP-SOA-1600-30db-25-CoC	1600nm SOA COC Chip	1600±25nm	30dB	19dbm
MP-SOA-1650-30db-25-CoC	1650nm SOA COC Chip	1650±25nm	30dB	19dbm