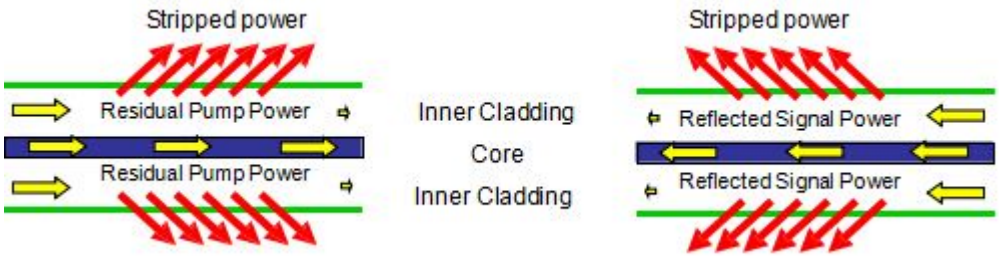
idealphotonics

Connecting the world,Sensing the futhure

Cladding Power Stripper (CPS)



Description

The multimode optical power stripper (Cladding Power Stripper - CPS) is designed for high power fiber laser and amplifier applications.

This device is ideal for stripping residual pump power, ASE and escaped core modes from inner cladding of double cladding fibers while preserving minimal degradation of signal power and beam quality (M2). Reflected signal power into the inner cladding can be stripped out as well.

Feathure

High Stripping Efficiency

Low Signal Loss and Beam Quality Degradation

Wavelength Insensitive

High Extinction Ratio (for PM version)

Customized Configurations Available

Specification

	Parameters/Test conditions		Min	Typ	Max	Unit	Not
1	Operating Wavelength		800		2000	nm	
2	Stripping Efficiency *	x/125 DCF, x=6, 10, 15, 20, etc.	20			dB	PM or non-PM fiber
3		x/250 DCF, x=25, 30, etc. PM or non-PM fiber	20			dB	
4		x/400 DCF, x=20, 43, etc. PM or non-PM fiber	17			dB	
5	Signal Insertion Loss			0.2	0.3	dB	
6	Signal Output Beam M^2			1.2		-	Depending on input

7	Polarization Extinction Ratio	17			dB	For PM fiber only
8	Fiber Length	0.			m	
9	Power Handling	Refer to the below table of Max. Stripped Power of				power stripped from inner
10	Operating Temperature	-5		+70	°C	
11	Operating Humidity	5		95	%RH	Not recommended under high
12	Storage Temperature	-40		+85	°C	
13	Package	C4, C7, H2			-	Refer to drawing.

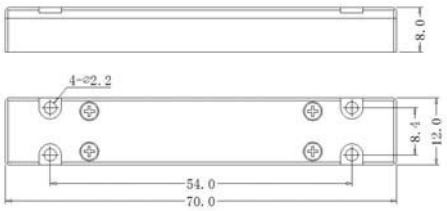
* Stripping efficiency is defined as -10lg(Po/Pin), Pin is the input optical power into the inner cladding and Po is the output optical power from the inner cladding. Optical power in the core can not be stripped out.

Max. Stripped Power of Different Packages						
	C4		C7		H2	
Fiber	Air Cooling	Water Cooling	Air Cooling	Water Cooling	Air Cooling	Water Cooling
x/125 DCF, x=6, 10, 15, 20, etc.	30W	40W	40W	75W	40W	75W
x/250 DCF, x=25, 30, etc.	30W	40W	50W	125W	75W	150W
x/400 DCF, x=20, 43, etc.	-	-	50W	125W	75W	150W

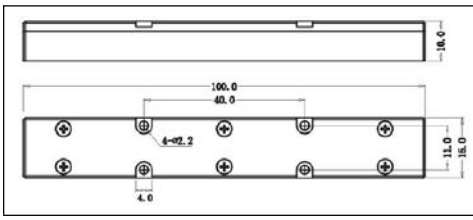
Note:
Device must be fixed tightly on a metal panel with heat conductive grease filled the gap.
Air Cooling: Metal panel be cooled by fans.
Water Cooling: Metal panel be cooled by cooled water above dew point

Package Dimensions

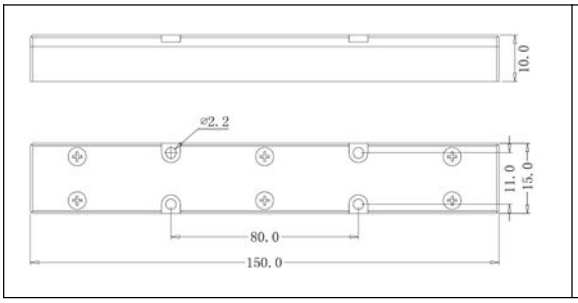
C4: 70x12x8mm



C7: 100x15x10mm



H2: 150x15x10mm



Ordering information

CPS-1x1-Fiber-Stripped power-Wavelength-Package-Fiber length

Fiber: Please refer to Idealphotonics fiber codes.