

1.1.2.9 Beam Dumps

Up to 11kW

Features

- Up to 11kW CW
- Water or Fan cooled
- High Power Density
- Ø45-65mm aperture



Model	BDFL500A-BB-50	BDFL1500A-BB-65	BD5000W-BB-50	BD10K-W	
Use	General purpose High power beam dump				
Absorber Type	Broadband	Broadband	Broadband	Beam Deflector + Broadband	
Spectral Range μm	0.19 - 20	0.19 - 20	0.19 - 20	0.8 - 20	
Typical Absorption	86% for 600 to 2500nm, 82% for 10.6 μm				
Aperture mm	Ø50mm	Ø65mm	Ø50mm	Ø45mm	
Maximum Incident Power	500W	1500W	5000W	11,000W	
Maximum Average Power Density	7kW/cm ²	6kW/cm ² at 1000W 1.5kW/cm ² at 1500W	6kW/cm ² at 1000W 3kW/cm ² at 5000W	See note ^(b) below	
Maximum Energy Density J/cm ²				See note ^(b) below	
<100ns	0.3	0.3	0.3		
1 μs	0.4	0.4	0.4		
0.5ms	5	5	5		
2ms	10	10	10		
10ms	30	30	30		
Cooling	fan	fan	water	water	
Minimum Water Flow Rate at Full Power	N/A	N/A	5 liter/min ^(a)	8 liter/min ^(a)	
Accessories for High Power Sensors	See pages 76-80	See pages 76-80	See pages 76-80	See pages 76-80	
Weight kg	0.9	2.4	2.8	4.5	
Compliance	CE, UKCA, China RoHS	CE, UKCA, China RoHS	CE, UKCA, China RoHS	CE, UKCA, China RoHS	
Version				V1	
Part number	7Z17200	7Z17203	7Z17201	7Z17205	
Notes: (a) Water temperature range 18-30°C. Water temperature rate of change <1°C/min. Pressure drop across BD5000W-BB-50 beam dump 0.06MPa. Pressure drop across BD10K-W beam dump 0.1MPa.					
Notes: (b) Max power and energy density	Beam diameter	Max power density	Max energy density		
	<15mm	10kW/cm ²	1ms pulse width	3ms pulse width	10ms pulse width
	15 - 20mm	7kW/cm ²	30J/cm ²	60J/cm ²	150J/cm ²
	20 - 40mm	5kW/cm ²	20J/cm ²	40J/cm ²	100J/cm ²
	40 - 45mm	4kW/cm ²	15J/cm ²	30J/cm ²	70J/cm ²
			12J/cm ²	25J/cm ²	60J/cm ²

