Uniblitz® DSS25B

25mm Bi-Stable Optical Shutter



Overview

The Uniblitz DSS25B is a 25mm-aperture bi-stable optical shutter that has eliminated the external protruding actuator and contains no other interfering components. This makes the DSS25B an extremely low-profile device that is capable of fitting into very tight spaces. Additionally, the device's flat mounting surfaces make for its easy integration into virtually any system.

Bi-stable shutter devices, like the DSS25B, require no power to hold the blades in either the open or closed state.

Need Support? Please <u>visit our website</u> or email us at <u>info@uniblitz.com</u>.

Tel: <u>585-385-5930</u> | Toll-Free: <u>800-828-6972</u> | Fax: <u>585-385-6004</u> | 803 Linden Ave. Rochester, NY 14625 Updated 1/17 | Datasheet Version 5.1 | ©2017 Vincent Associates

Key Features

- 25mm aperture
- Bi-stable operation
- Only two unique moving parts
- Slim, low-profile form-factor
- RoHS Compliant
- Transfer time on opening:

12.6 milliseconds

• Total opening time:

25.8 milliseconds

Configured for the <u>VED24</u>
 <u>Shutter Driver</u>

Product Options

DSS25B 2 3 4 5

Ex: DSS25B1T0

1 Shutter Series:

2 Housing:

• DSS25B

• 1: Un-housed

3 Blade Coating: 1

• **T:** Low Energy (Teflon®)

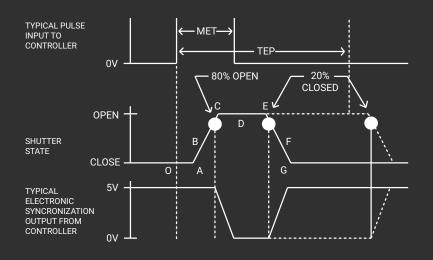
• **ZM:** High Energy (AlMgF2) ²

4 Electronic Sync:

• 0: Omitted

- **6** Connector: ³
- L: 2 wire bare leads attached to a 4" flex connector
- Leave blank for 2-pin JST connector with 4" flex harness

Shutter Timing



DSS25B (w/ ED12DSS and Teflon® coated blades) Time (msec.)						
O - A	Delay time on opening after current applied	13.2				
A - C	Transfer time on opening	12.6				
O - C	Total opening time	25.8				
C - E	Min. dwell time with min. input pulse	23.2				
B - F	Min. equivalent exp. time	36.6				
D - E	Delay time on closing after current applied	14.0				
E - G	Transfer time on closing	14.0				
A - G	Total window time	50.8				
MET	Min. exposure time	35.0				
TEP	Typical exposure pulse	>35.0				

¹Other blade coating options may be available by special order.

² Input side only; Teflon® coating is on opposite side to protect shutter blade surface. Light source must be input to the reflective side only.

³ Custom terminations are available. Please contact a technical representative for more information.

Technical Specifications

Coil Resistance	Voltage to Open	Hold Voltage
7.5 Ω	+12 VDC ¹	N/A

Series	Weight	Operating Temp.	Max. Opening Bounce	Max. Closing Bounce	Max. Freq. of Operation ²	Number of Shutter Blades
DSS25B	0.73 oz (20.70 g)	-10 - 65 °C	15%	5%	5 Hz / 10 Hz	5

¹Peak voltage as provided by the <u>VED24 Driver</u>

²(Continuous/Burst) Continuous frequency rating specified at shutter's minimum exposure pulse. Burst frequency rating specified for four (4) seconds maximum with one (1) minute minimum between bursts.

Technical Drawings - DSS25B

