

INTRODUCING THE N-CAS[®] DSS SERIES SHUTTERS

(PRELIMINARY SPECIFICATIONS)

Our Newest N-CAS[®] Shutters, the DSS10 & DSS20 from Vincent Associates!

Since the recent introduction of the **UNIBLITZ[®] II** N-CAS[®] NS Series, customers have been requesting a device that can be easily scaled for their particular application and contain no protruding actuator or other interfering components. We have taken notice of these requests and have created our newest patent pending device, the DSS shutter series. The DSS (Design Scalable Shutter) devices will further expand our capabilities to respond and meet the needs of our customers.

FEATURES

UNIBLITZ[®] II
By
Vincent Associates
803 Linden Avenue
Rochester, NY 14625

- ② **FLAT MOUNTING SURFACES ON BOTH SIDES OF THE DEVICE**
 - There are no protruding components allowing flush mounting on either side of the shutter.
- ② **EASILY INTEGRATED INTO CUSTOMER APPLICATIONS**
 - Circular envelope with concentric aperture allow for easy and fast integration into customer specific applications.
- ② **SCALABLE DESIGN**
 - Simplicity of design allows for unprecedented ease of scaling from apertures as small as 10mm.
- ② **LOW COST FOR A CUSTOM APERTURE**
 - Until now a redesign for specific aperture openings of a shutter device would incur substantial NRE's. The DSS shutter is specifically designed to take advantage of its versatility.
- ② **CAN BE A REPLACEMENT FOR EXISTING FLAG SHUTTERS**
 - Flag shutter devices are difficult to design on center and require additional offset space in a camera for the actuator. DSS devices can be centered on aperture and hence the overall space required for a given aperture is substantially less.
- ② **BLADES CAN BE COATED FOR IR APPLICATIONS.**
 - DSS shutters are particularly suited for Non-Uniformity Correction applications.
- ② **TWO DISTINCT MOVING PARTS**
 - The drive ring and blades are the only parts in motion limiting points of wear.
- ② **LOW VOLTAGE OR LOW CURRENT OPERATION**
 - Bi-stable operation significantly reduces power draw. Can be designed to take advantage of your particular system, whether it is battery powered or takes power from line voltage.

Due to our ongoing product development program, Vincent Associates reserves the right to discontinue or change specifications or designs at any time, without incurring any obligations.

UNIBLITZ[®] II
ELECTRO-PROGRAMMABLE SHUTTER SYSTEMS

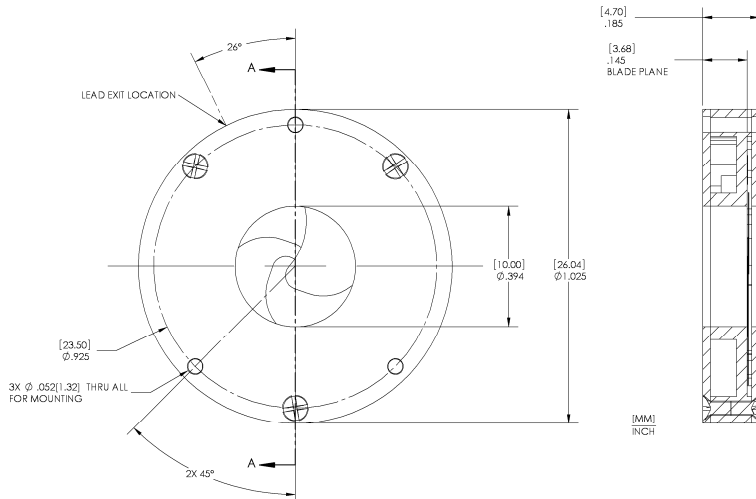
Website: www.uniblitz.com
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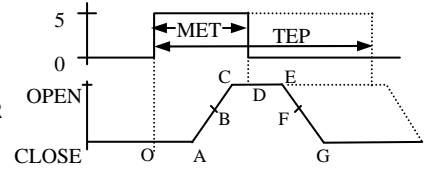
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DSS10, 10mm Shutter Profile



TYPICAL PULSE



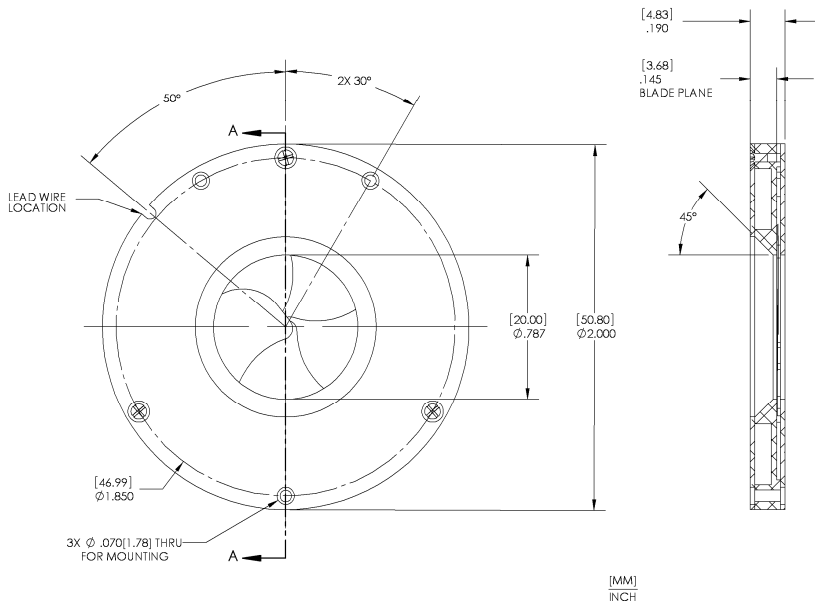
O-A Delay time on opening after current is applied	3.1
A-C Transfer time on opening	3.4
O-C Total opening time	6.4
B-F Min. equivalent exp. Time	10.1
C-E Min. dwell time with min. input pulse	6.7
D-E Delay time on closing after current is applied	3.1
E-G Transfer time on closing	3.4
A-G Total window time	16.4

MET: Min. exposure time 10.0
TEP: Typical exposure pulse >10.0

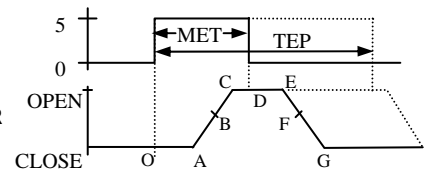
*Timing data recorded at 12V DC with drive pulse equal to MET

The DSS10 shutter device weighs 4.4g and is only 1.025" in diameter! You will notice that there are no other interfering components that will impede mounting the unit to any flat surface. It is easily mounted into an optical system via the three .052 diameter mounting holes at the locations shown in the above drawing. Presently the unit will terminate to two AWG #30 18" flying leads which are not shown.

DSS20, 20mm Shutter Profile



TYPICAL PULSE



O-A Delay time on opening after current is applied	5.4
A-C Transfer time on opening	10.2
O-C Total opening time	15.6
B-F Min. equivalent exp. Time	25.0
C-E Min. dwell time with min. input pulse	13.8
D-E Delay time on closing after current is applied	5.4
E-G Transfer time on closing	10.2
A-G Total window time	39.6

MET: Min. exposure time 25.0
TEP: Typical exposure pulse >25.0

*Timing data recorded at 12V DC with drive pulse equal to MET

The DSS20 shutter device weighs 15.6g and is only .190 inches thick! You will notice that there are no other interfering components that will impede mounting the unit to any flat surface. It is easily mounted into an optical system via the three .070 diameter mounting holes at the locations shown in the above drawing. Presently the unit will terminate to two AWG #30 18" flying leads which are not shown.

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