



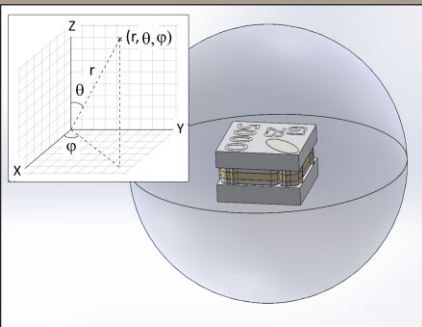
Micro G Switch Omnidirectional Contact Model AT-500-O

FEATURES:

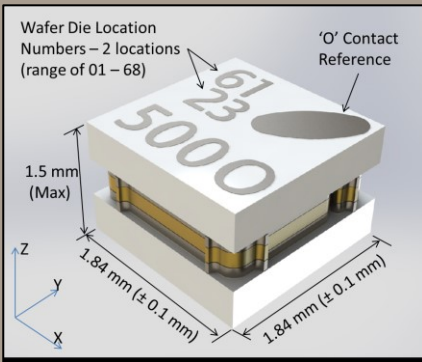
- Small and Lightweight – 3.4 mm²
- Extremely Fast Response Times
- High Shock Survivability – 65,000+ g
- Surface Mount – Au over Ni Pads
- Tape and Reel Packaging
- Hermetic Seal

APPLICATIONS:

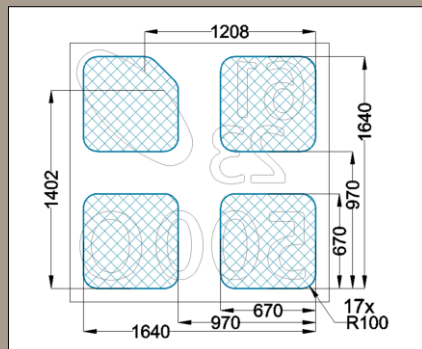
- Impact Detection
- Arming / Fuzing / Launch
- More



AT-500-O Sensitivity Direction
(Theta 0 to 180 degrees, Phi 0-360 degrees)



AT-500-O Device Dimensions



AT-500-O Pad Dimensions (micrometers) as viewed from pad side of device

Specifications

OPERATING CHARACTERISTICS:

Sensitivity Directions	..... +Z & -Z (normal to PCB), XY plane (parallel to PCB)
Contact Acceleration Threshold Range	at Theta = 0, 90, and 180 degrees, Phi 0 to 360 degrees (5)..... 500 ± 150 g
Contact Type (4)	..... Normally Open, Non-Latching
Response Time (2) (3)	..... < 175 μs
Reset	..... Automatic with acceleration decay

ELECTRICAL CHARACTERISTICS

Contact Resistance (1)	..... < 10 ohms
Insulation Resistance (min.)	..... 1000 Mohm
Breakdown Voltage	..... >200 VDC

ENVIRONMENTAL RATINGS:

Operate Temperature Range	..... -55 to +125 °C
Storage Temperature Range	..... -55 to +125 °C
PCB/Pad Shear Force	..... > 20 N
Shock Survival (6)	..... >65000 g

PHYSICAL CHARACTERISTICS:

Nominal Dimensions (LxWxH)	..... 1.84 x 1.84 x 1.3 mm
Volume	..... 3.7 mm ³
Mass	..... 20 milligrams
ROHS Compliant?	..... Yes

- (1) Contact resistance is dependent on input pulse acceleration level.
- (2) Response time is a function of the acceleration profile.
- (3) Response time for a 1000g acceleration step input.
- (4) Electrical connection between pads 'C'(common) & 'O' is normally open and is closed while acceleration is greater than the contact acceleration threshold in any direction
- (5) Contact Acceleration Threshold is approximately 40% greater at a theta angles of 45 and 135 degrees
- (6) The Micro G Switch devices are designed to survive the extreme high shock environments associated with artillery launch events.

Note that the information on this data sheet is for reference only.

As each application may have unique requirements, please verify the specifications as well as suitability of using our products in your applications by consulting our engineering department.

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