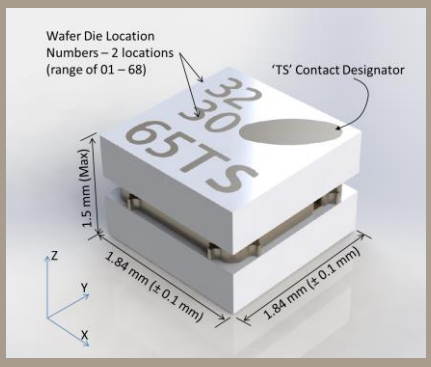
Micro G Inertial Switch
Top & Side Contact
Model AT-65-TS

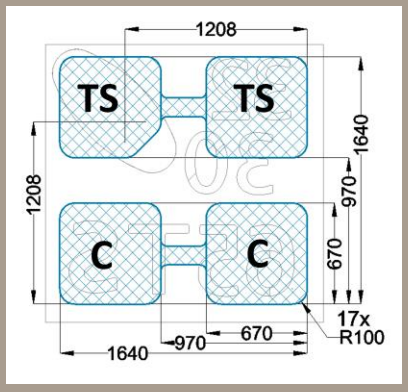
PRELIMINARY

FEATURES:
- Small and Lightweight – 3.4 mm^2
- Extremely Fast Response Times
- High Shock Survivability – 65,000+ g
- Surface Mount – Au over Ni Pads
- Tape and Reel Packaging
- Environmental Seal

APPLICATIONS:
- Impact Detection
- Arming / Fuzing
- Artillery, Launch
- More



AT-65-TS Device Dimensions



AT-65-TS Pad Dimensions (micrometers) as viewed from **PAD** side of device

Specifications

OPERATING CHARACTERISTICS:

Sensitivity	-Z (normal to PCB) XY Plane (parallel to PCB)	
Contact Acceleration Threshold	50 to 80	g
Contact Type (4)	Single Pole, Normally Open, Non-Latching	
Response Time (2)	< 600	µs
Reset	Automatic with g decay	

ELECTRICAL CHARACTERISTICS

Contact Resistance (1)	< 100	ohms
Insulation Resistance (min.)	1000	Mohm
Breakdown Voltage	>230	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 (5)	>65000	g

PHYSICAL CHARACTERISTICS:

Dimensions (LxWxH)	1.84 x 1.84 x 1.15	mm
Volume	3.9	mm^3
Mass	20	milligrams
ROHS Compliant ?	Yes	

(1) Contact resistance is dependent on input pulse acceleration level.
(2) Response time depends upon input pulse profile.
(3) Response time shown for acceleration step input at the contact acceleration threshold.
(4) Electrical connection between pads TS (combined top and side) and C (common) is normally open and is closed while acceleration is greater than the contact acceleration threshold.
(5) The Micro G Switch devices are designed to survive the extreme high shock environments associated with artillery launch events.

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