

MLX92242 / MLX92241 / MLX92221

2-WIRE SENSOR

WITH INTEGRATED  
CAPACITOR



The hammerhead shark is able to detect electronic signals of no more than half a billionth of a volt. The process uses specialized electroreceptors to detect and locate the source of an external electric field in its environment. What better animal to reflect our sensing capacities?

## ASIL A - END-OF-LINE PROGRAMMABLE 2-WIRE HALL LATCH/SWITCH

Melexis presents a new package option, featuring an integrated decoupling capacitor, for its existing 2-wire Hall effect switch and latch sensor ICs.

MLX92242

**ASIL** | READY  
BY MELEXIS

This new package option enables PCB-less modules and assemblies while retaining the EMI/ESD performance necessary in harsh duty environments. The pin ordering for this option is optimized to allow wider clearance and direct connection via welding or soldering to a connector or an insert molded lead frame connector. This avoids any secondary operations typically consisting of bending of the leads.

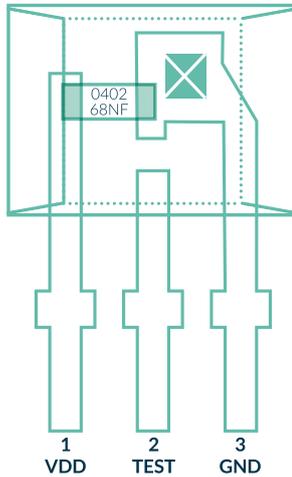
### FEATURES & BENEFITS

- ✓ Smaller module design
- ✓ Lower BOM count
- ✓ Higher reliability from fewer components and connections
- ✓ Elimination of secondary lead form and trim operations
- ✓ Wider clearance
- ✓ Optimized EMI/ESD design
- ✓ PCB-less applications
- ✓ Integrated decoupling capacitor
- ✓ AEC-Q100 qualified
- ✓ Industry standard SIP TO-92 "UA" package
- ✓ ISO26262-compliant

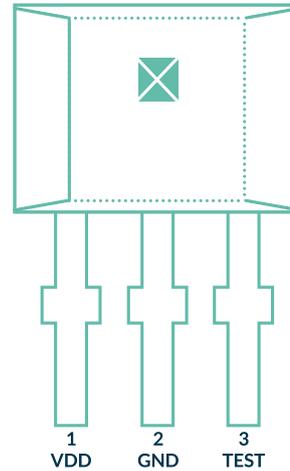


## MAIN APPLICATIONS

- ✓ Seat position detection
- ✓ Seatbelt buckle switch
- ✓ Open close detection



NEW SIP UA PACKAGE  
OPTION WITH WIDER  
PIN-OUT FOR NO PCB  
ASSEMBLIES



STANDARD  
MLX92242/41/21 SIP UA  
PACKAGE AND PIN-OUT

## MLX92242 INTEGRATED DECOUPLING CAPACITOR BLOCK DIAGRAM

