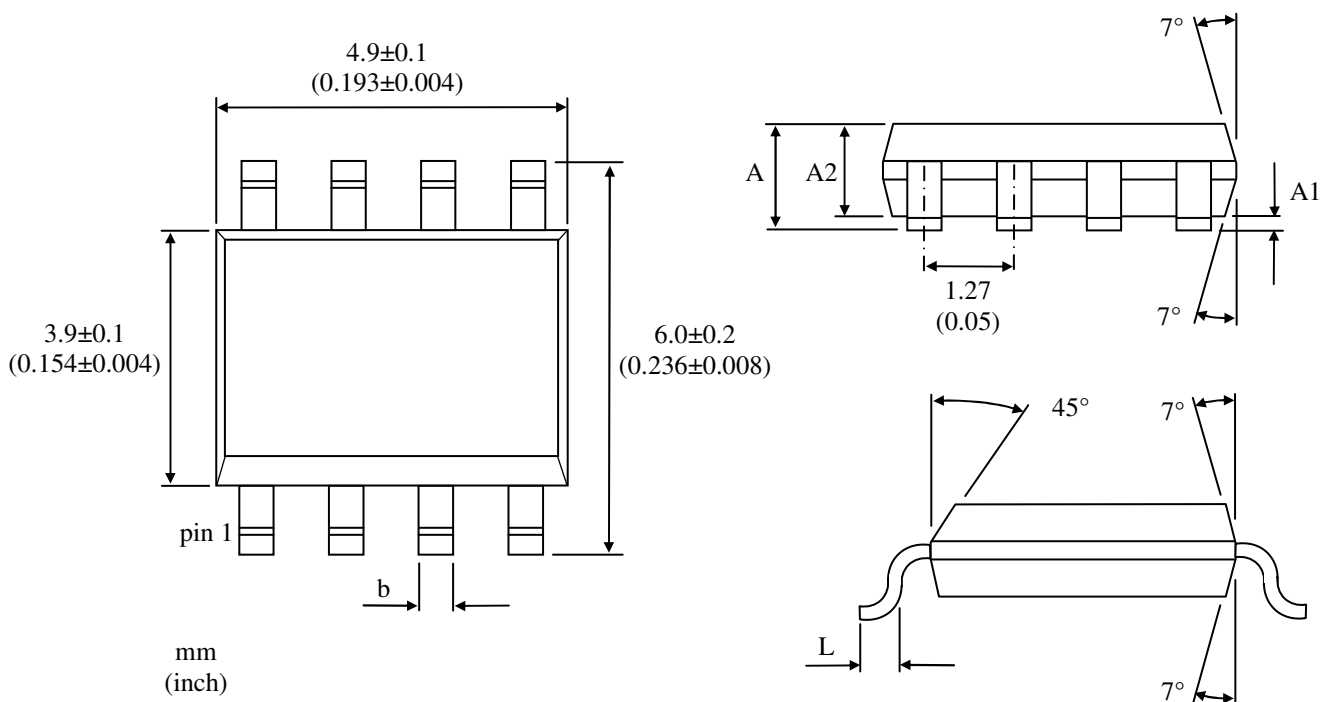


## Scope

This Technical note lists the differences between two versions of the Integrated 2-Axis Hall Sensor MLX91201 in SOIC8 package – 2SA-10 and 2SA-10G. The transition to a RoHS compliant package will impact package dimensions and die placement inside the package. The potential impact on the customer’s application is also covered.

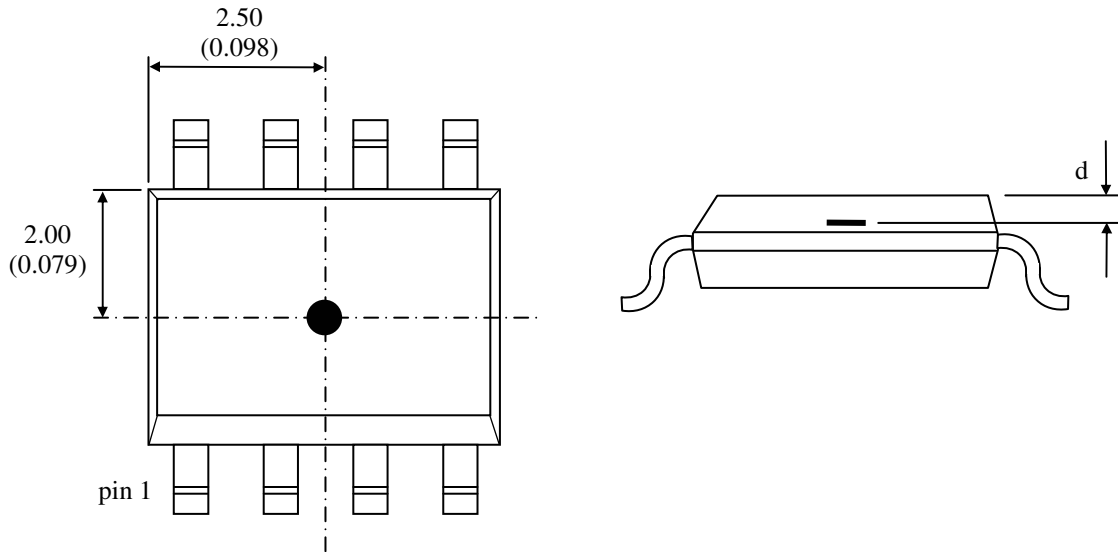
## Package Dimensions

Changed Dimensions, mm (inch)	2SA-10 (Leaded)	2SA-10G (RoHS complaint)
A	max 1.60 (max 0.063)	max 1.72 (max 0.068)
A1	$0.05 \pm 0.05$ ( $0.002 \pm 0.002$ )	$0.18 \pm 0.07$ ( $0.007 \pm 0.003$ )
A2	$1.40 \pm 0.10$ ( $0.055 \pm 0.004$ )	$1.47 \pm 0.10$ ( $0.058 \pm 0.004$ )
b	$0.43 \pm 0.05$ ( $0.017 \pm 0.002$ )	$0.41 \pm 0.05$ ( $0.016 \pm 0.002$ )
L	$0.60 \pm 0.15$ ( $0.024 \pm 0.006$ )	$0.84 \pm 0.43$ ( $0.033 \pm 0.017$ )



## Magnetic Sensitive Spot Location

Changed Sensitivity Spot Depth, mm (inch)	2SA-10 (Leaded)	2SA-10G (Lead Free)
d	$0.80 \pm 0.05$ ( $0.032 \pm 0.002$ )	$0.41 \pm 0.05$ ( $0.016 \pm 0.002$ )



### ***Impact on the Existing Applications***

In order to keep measurement results unchanged, the density of the magnetic field through the magnetic sensitivity spot of MLX91201 should stay unchanged as well. A special attention should be paid for the applications using permanent magnets for creation of the magnetic field – the distance between the magnet and the sensitivity spot inside the chip should be kept the same.

### ***Contact Person at Melexis for Technical Questions***

For further technical details please contact Samuel Hueber (sah@melexis.com).