Technical Note

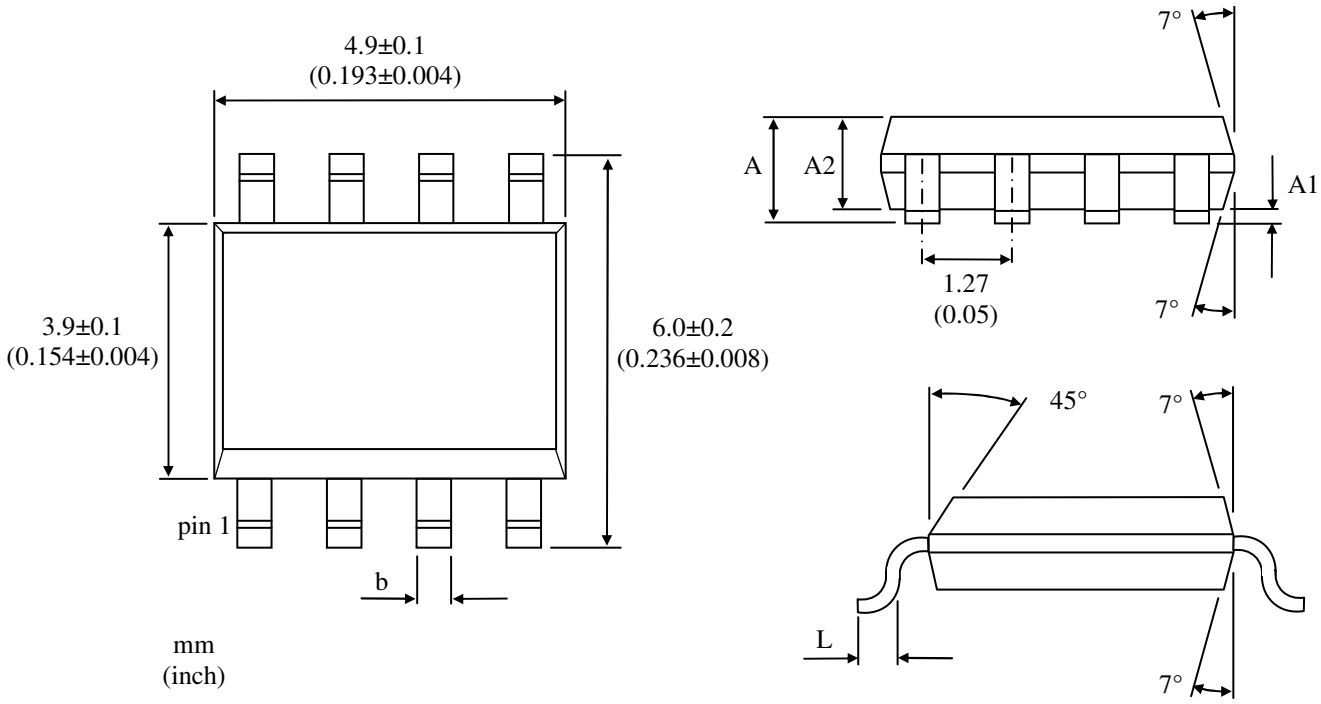
MLX91201: Transition from 2SA-10 to 2SA-10G

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.

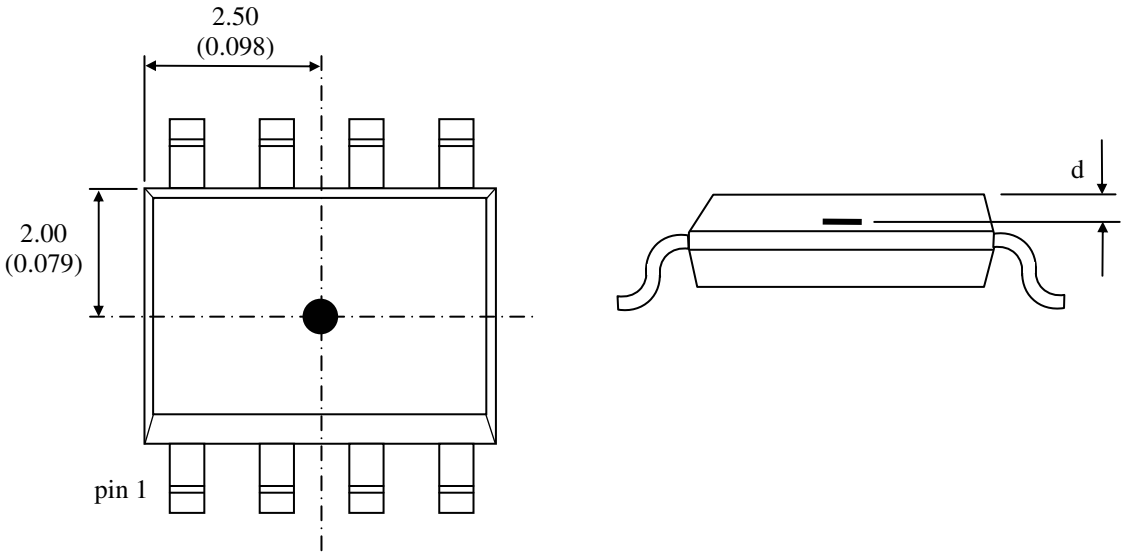
Package Dimensions

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 ± 0.05 (0.002 ± 0.002)	0.18 ± 0.07 (0.007 ± 0.003)
A2	1.40 ± 0.10 (0.055 ± 0.004)	1.47 ± 0.10 (0.058 ± 0.004)
b	0.43 ± 0.05 (0.017 ± 0.002)	0.41 ± 0.05 (0.016 ± 0.002)
L	0.60 ± 0.15 (0.024 ± 0.006)	0.84 ± 0.43 (0.033 ± 0.017)



Magnetic Sensitive Spot Location

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