Pre-Mounting Process

This application note provides recommendations for how to insert the leads of axial and through-hole devices from Vishay Semiconductors into the PCB. Below we offer tips on lead bending and lead cutting, which are typically part of the pre-mounting process.

LEAD BENDING

a) Axial Devices

- When bending the leads, they must be clamped between the device body and the bending point (Fig. 1).
- Leads should be bent at a minimum distance of 2.5 mm from the diode body (Fig. 2).
- Leads should never be bent more than once at the same point.

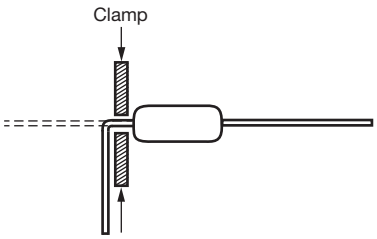

Fig. 1

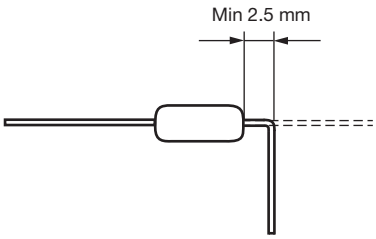

Fig. 2

b) Through-Hole Devices

Bending guidelines for through-hole devices depend on whether the package leads are of uniform width or wider near the package body.

- For packages with leads of uniform width, the minimum distance between the package body and the bend point should be 2.5 mm (Fig. 3).
- For packages with leads that widen near the body, the bending distance should be no less than length L marked in Fig. 4.
- When bending the leads, they must be clamped between the device body and the bending point (Fig. 5).

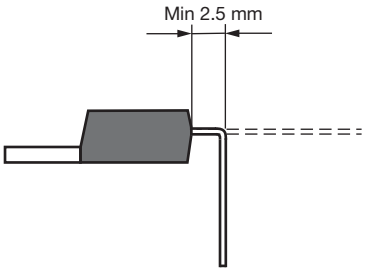

Fig. 3

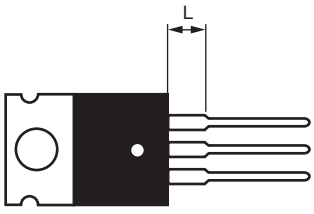

Fig. 4

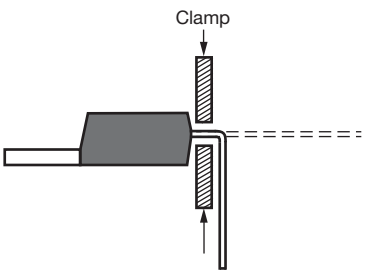

Fig. 5

LEAD CUTTING

The leads of both axial and through-hole devices can be cut before mounting or after mounting or soldering.

When cutting after soldering, the mechanical force may damage the solder joint but usually does not harm the component body. When cutting before soldering, the leads should be clamped as shown above and the above directions for lead bending should be followed.

APPLICATION NOTE

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