

Notes on soldering

1. Type

TO-92, TO-92S packages

2. Storage

The epoxy resin used in packages absorbs moisture in air, and the absorbed moisture vaporizes and expands during mounting. When the absorbed moisture amount becomes large, package cracks may occur.

For this reason, storage in lower humidity environment is recommended.

Packages adapted to the storage condition of the ambient temperature (T_a) of 5 to 30°C and relative humidity (RH) of 40 to 70%. This product is suitable for using it within one year.

3. Rinse

When rinse-free flux is applied, rinsing is not necessary. It may cause corrosion when residue of the active agents remained in the flux. Good selection of flux is indispensable to avoid corrosion.

4. Resistance to soldering heat (Flow soldering and Soldering Iron)

4.1 Flow soldering

Flow soldering gives larger thermal stress to the package compared to reflow. Preheating is indispensable to relax the thermal stress.

Figure 1 shows the resistance to soldering heat condition for package (Flow method).

Confirm the package of heat resistance in the following range.

The peak temperature of flow soldering at 260°C for 10 seconds or less.

(Preheating temperature and time are the reference value)

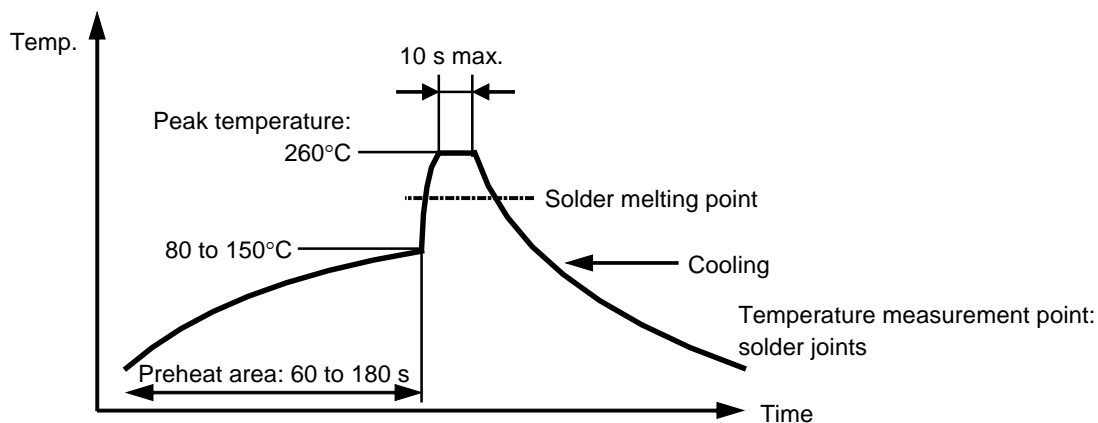


Figure 1 Resistance to soldering heat condition for package (Flow method)

Number of maximum flow cycles: Once

4.2 Soldering Iron

When using a soldering iron or heating collet, you should observe the following precautions only to a terminal part.

Each terminal part

- ① Maintain the maximum temperature of the soldering iron at 380°C for 5 seconds or less.
- ② Number of maximum Iron cycles: Two times