

5. PRECAUTIONS

① Voltage

Do not exceed maximum ratings. Observe recommended operating conditions. Strictly avoid surge voltage and electrostatic discharge during storage, handling and mounting of the Hall effect IC.

When designing circuits, always consider temperature; characteristics of semiconductors change with ambient temperature.

② Lead Forming (EW-5**)

In case of lead bending, the following conditions are required to be maintained:

- 1) No mechanical stress is on resin package.
- 2) No torque is on leads.
- 3) No tension is recommended. The following condition (Fig. 1) must be met.


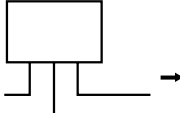
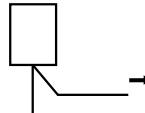
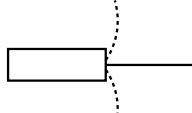
TENSION I	TENSION II	TENSION III	FATIGUE
			
≤ 13.7N	≤ 7.8N	≤ 2.9N	within 3 times

Figure.1 Terminal Strength

③ Soldering conditions

- (1) Dip soldering conditions: Within range shown in Figure 2.
- (2) Reflow soldering: Maximum conditions as shown in Figure 3.
- (3) Hand-soldering: Solder the leads to PC board at the point (part from the body) at 260°C for 10 seconds or 350°C for less than 3 seconds. Please contact AKM to obtain the latest information about Superminimold-type
- (4) Use of resin flux is recommended.

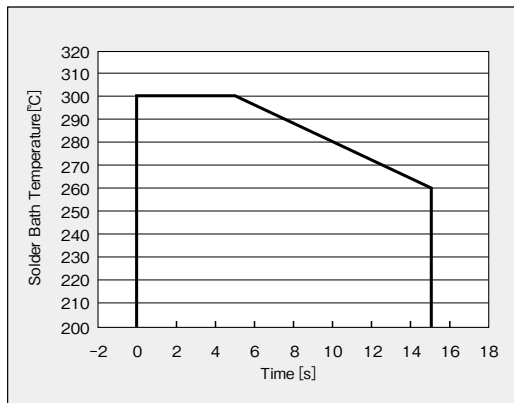


Figure.2 (Reference) Conditions of Dip Soldering

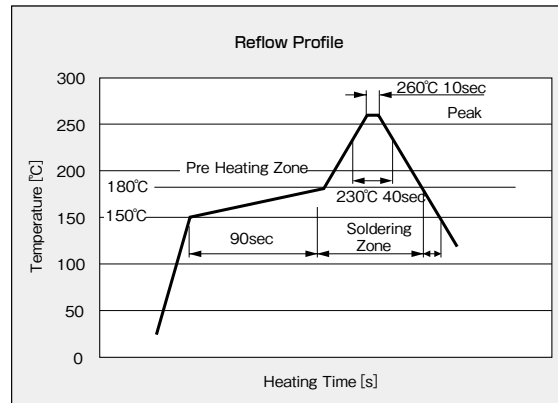


Figure.3 (Reference) Conditions of Reflow Profile

④ Cleaning, removal of flux residue

- (1) Solvents: Ethanol, isopropyl alcohol (IPA)
- (2) Temperature: Max. 50°C
- (3) Time: Max. 5minutes
- (4) Ultrasonic cleaning:
 - Frequency Max. 45kHz
 - Power Max. 40W/ℓ

⑤ Storage conditions

The Hall effect ICs must be stored at an appropriate temperature (5 to 35°C) and humidity (40 to 85%RH). Keep them away from chlorine and corrosive gas.

⑥ Long-term storage

Long-term storage may result in poor lead solderability and degraded electrical performance even under proper conditions.