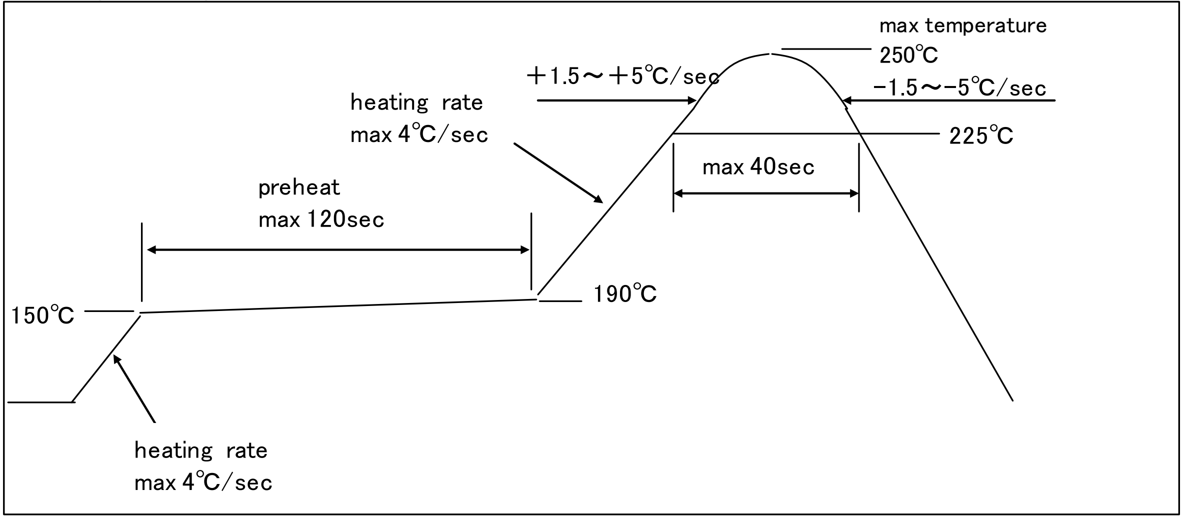
# 1. SOLDERING CONDITIONS (Pb-free)

## 1.1. Precautions for Soldering

- The product is susceptible to moisture. Soldering with moist head could bring about cracks in resin, or interfacial peeling between the resin and others.
- Please check carefully to see if there is no particles on the product surface before soldering.
- Please be careful not to cause mechanical stress on or excessive vibration to the product until it declines to room temperature, after soldering.

## 1.2. Infrared Reflow Method

Temperature profile condition as shown below (temperature of package surface) is recommended for whole heating soldering method.



(1) In accordance with 2.(2) please reflow in time in an environment of default.
(2) $N_2$ atmosphere should be used in reflow chambers.
(3) Number of reflows is up to two time.
(4) Please make sure to reduce temperature ripple of preheat to the extent possible.
(5) Please do not touch the product after reflow soldering until it declines to room temperature, to prevent the resin deformation.
(6) Note that inadequate reflow condition could cause significant fluctuation of output signal amplitude.

## 1.3. Head Cleaning

When cleaning the heads, wipe softly with lint free wiper (e.g. BEMCOT) moistened with methanol or ethanol. Note that using other chemicals or rubbing the heads could cause scratches, tarnish, corrosion on surface of the heads.

## 2. STORAGE AND MANAGEMENT AFTER OPENING THE PACKAGE

(1) Before opening: Stored at temperature of 30°C or less, and humidity of 60% or less, please mounting within one year.

(2) After opening: Please mounting within 72 hours at temperature 30°C or less, and humidity of 60% or less. If you have pass more than 72 hours, please make sure to bake the product at 125°C±5°C for 3 hours before the reflow, and please mounting within 72 hours at temperature 30 °C or less, and humidity of 60% or less. Baking by 125°C should be performed only one time.

※stored for more than 72 hours after opening, store at 30°C or lower and 60% RH or less, and use within 1 month. When using after the storage, bake according to the conditions in (2) and implement within 72 hours.

## 3. PRECAUTIONS FOR MOUNTING AND AFTER MOUNTING

- Please be careful not to touch the light receiving and emitting parts on the surface of this product.
- Please be careful not to bring the scale into contact with the product, when mounting and adjusting the product / scale.
- Please make sure that the product should be mounted in light blocking structure, to prevent incidence of outside light, or LED light emission from the product.
- Please make sure that the product should be mounted in structure that suppresses thermal elevation, considering heat release efficiency.
- Mounting operation should be performed under appropriate temperature and humidity conditions. Note that humidity highly affects electrostatic generation, and static electricity could be easily built up under low humidity conditions. Operating temperature of 20°C ~28°C, and relative humidity of approximately 50% are recommended.
- After mounting the product / scale, please do not bring the product into contact with other objects, or not to apply pressure on the product.
- Particles, naps, oils, fluids on surface of the product / scale could drastically reduce signal amplitude. Keep them off the product when mounting. Also, it is preferable that the product should be mounted in a structure free from particles or naps.