



MECHATROLINK Members Association

## Announcement of Change of Designated Manufacturer of the Pulse Transformer for MECHATROLINK-II

### 1. Introduction

It has been decided to change the designated manufacturer of the pulse transformer for the MECHATROLINK-II from an overseas to a domestic Japanese manufacturer to ensure continuity and the stable supply of this component. Yaskawa Electric Corporation remains as the distributor of this component to the MMA members. There is no difference in the functions and features between the new and previous pulse transformers.

The standard circuit specifications are to be changed using the new component, including the parts list. Inquire Yaskawa Electric for official specifications of the new component.

For the time being, both previous and new components are available. However, it is strongly recommended to promote change to the new component.

### 2. Details of Change

#### 2.1 Model No.

Please refer to the following previous and new pulse transformer model numbers when placing an order to Yaskawa Electric. There is no change in the lot size for order.

Previous component model No.: T202004DT

New component model No.: T202004ND

#### 2.2 Price

The previous and new pulse transformer prices are as follows:

T202004DT (previous component): 400 yen per pc      120,000 yen per lot (300 pcs)

T202004ND (new component): 350 yen per pc      105,000 yen per lot (300 pcs)

### 2.3 Functions and Features

There is no difference in the functions and features between the previous and the new pulse transformer. However, the appearance and dimensions of the new component's package are different from the previous one.

Mounting compatibility has been confirmed. However, for the PCB on which the recommended pad is not used, the users are requested to check the mounting by themselves.

Change in the package dimensions (Please confirm with Yaskawa Electric for official specifications.)

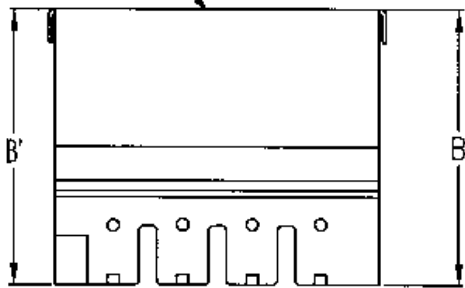
#### T202004DT (Previous Component) Exterior Dimensions, and Its Recommended Pad

##### 1. MECHANICAL DIMENSIONS :



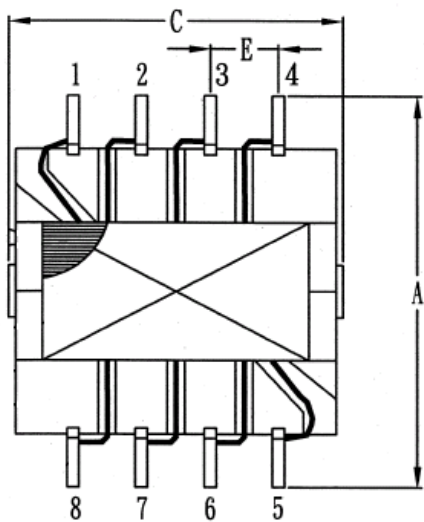
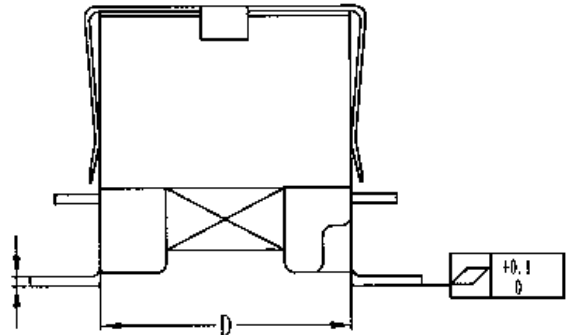
DCGM : DELTA DONGGUAN PLANT  
 XXXX : DATE CODE

85H-5005  
 MARKING : DCGM XXXXA

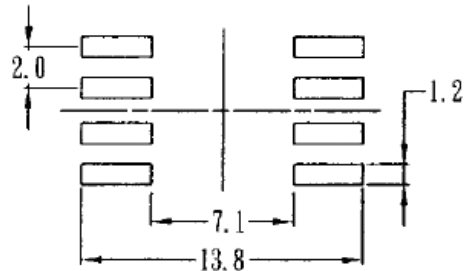


Slope range:  $|B-B'| < 0.5\text{mm}$

$0.4 \pm 0.05$   
 (0.4\*0.6)



COPLANARITY SPECIFICATION :  
 LESS THAN 0.004"



##### PCB LAYOUT

UNIT : mm

A = 13.0 MAX

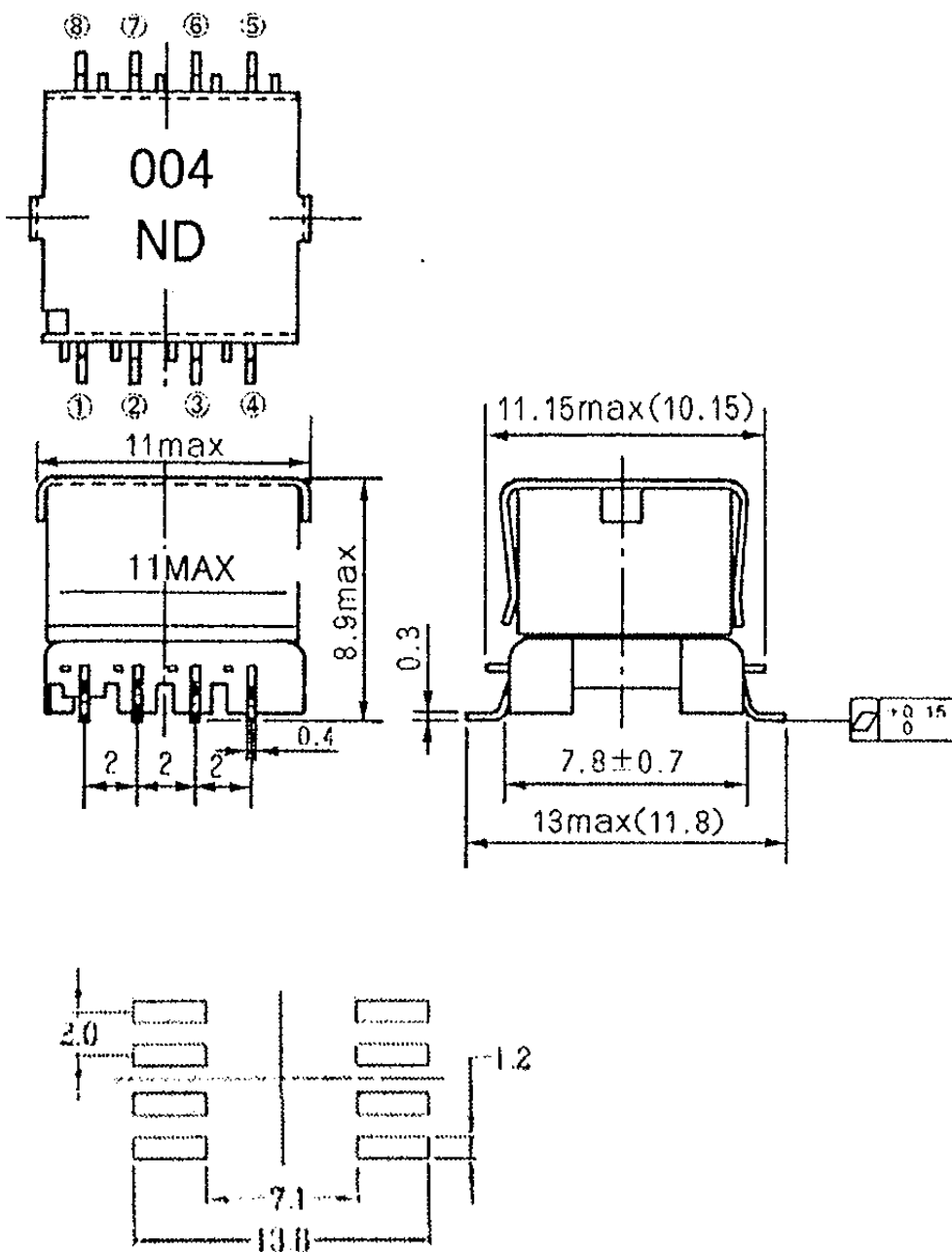
B = 8.5 TYP/8.9 MAX

C = 11.0 MAX

D = 7.8 ± 0.7

E = 2.0 ± 0.5

T202004ND (New Component) Exterior Dimensions, and Its Recommended Pad

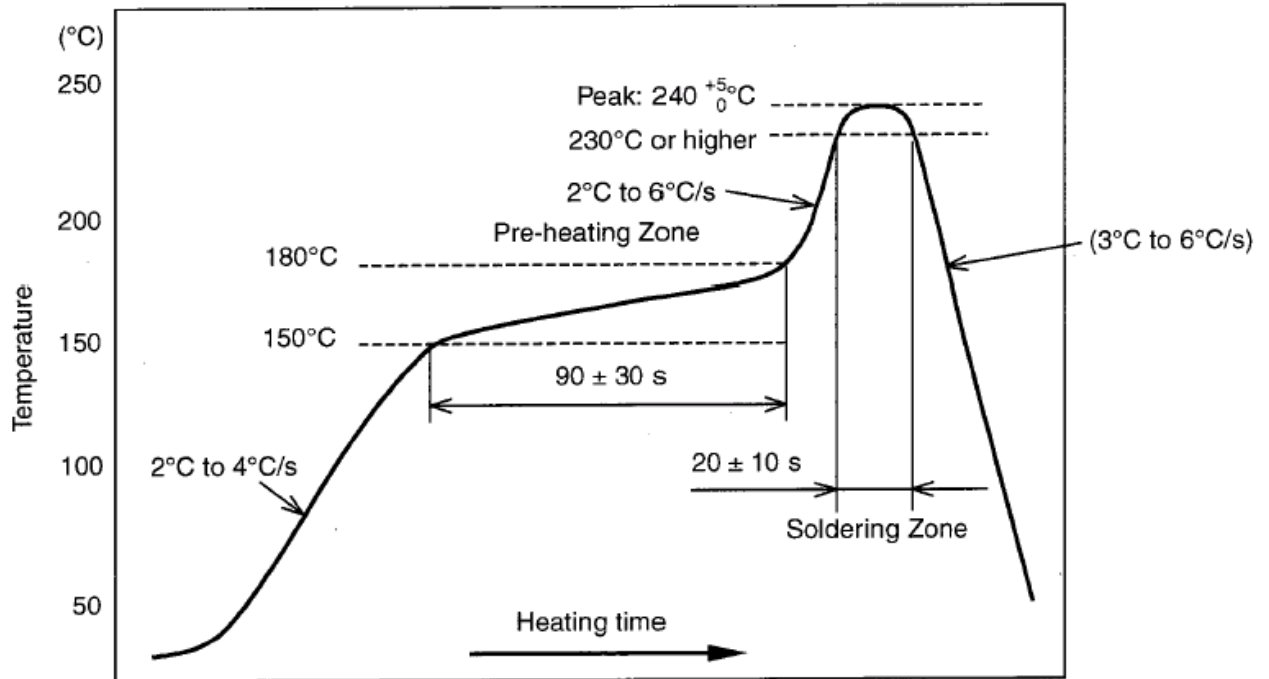


## 2.4 Temperature Profile (Please confirm with Yaskawa Electric for official specifications.)

The temperature profiles of the previous and new pulse transformers are as shown below.

Since there are some differences in maximum temperature, etc., please check the solder heat resistance evaluation and other relevant factors.

T202004DT (Previous Component) Temperature Profile

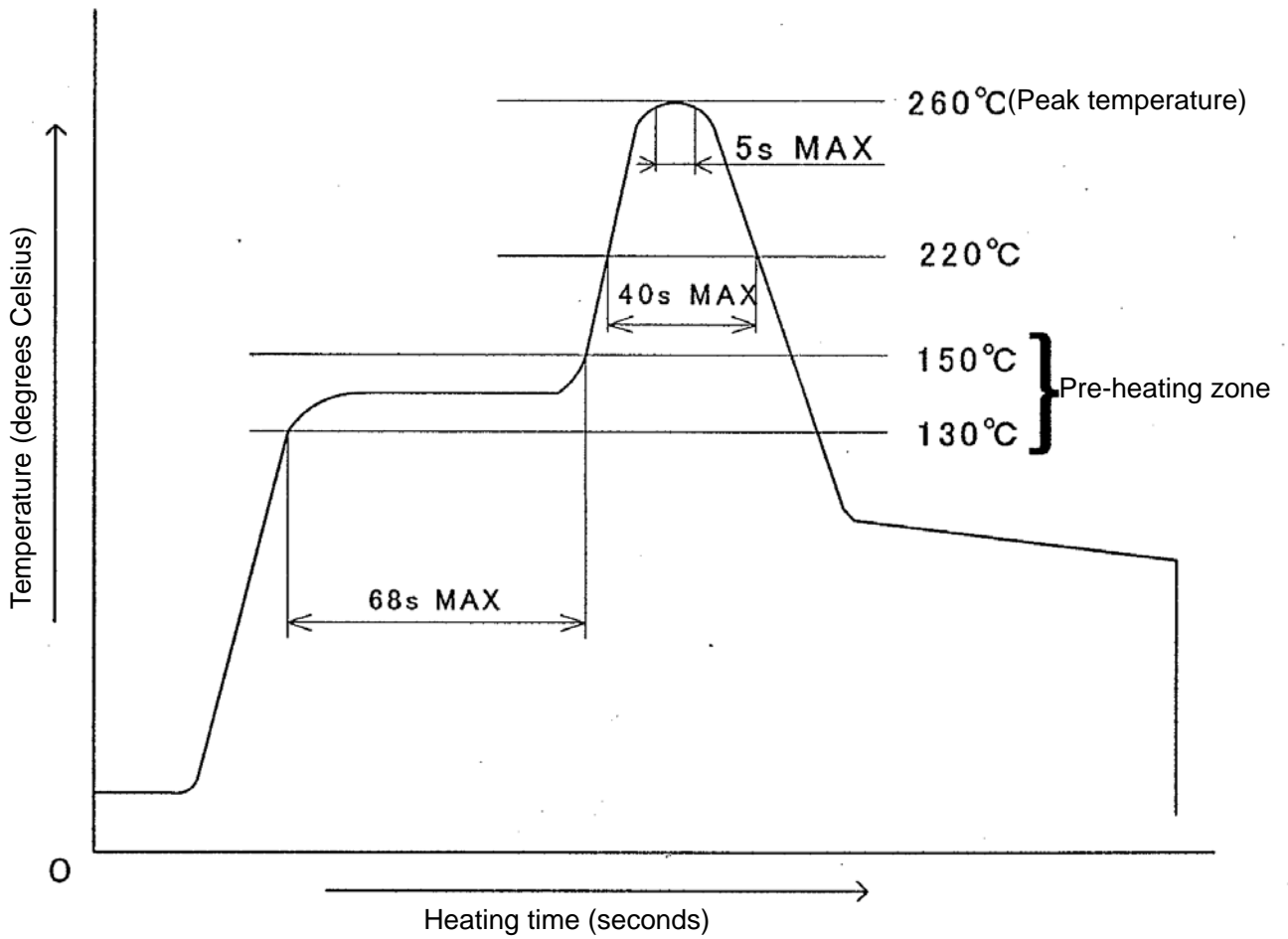


**Figure 5.1 Temperature profile for evaluation of solder heat resistance of a component (at solder joint)**

Note:

- (1) Max. temperature: 240 °C
- (2) Max. temperature time: 5 seconds
- (3) Heating temperature zone: 230 to 240 °C
- (4) Heating temperature time: 20 +/- 10 sec.
- (5) Pre-heating temperature zone: 150 to 180 °C
- (6) Pre-heating temperature time: 90 +/- 30 sec.
- (7) Max. number of reflow: 3 times

T202004ND (New Component) Temperature Profile



- Soldering conditions with the use of soldering iron  
Temperature at soldering tip:  $400 \pm 10$  degrees Celsius  
Soldering time: 3 seconds or less
- Solderability  
New solder adherence to three quarters or more on the soldered surface with five seconds of soldering at 250 degrees Celsius