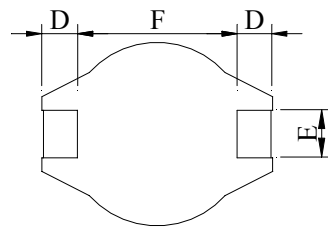
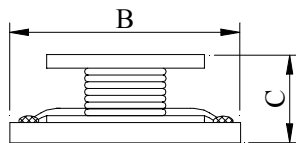
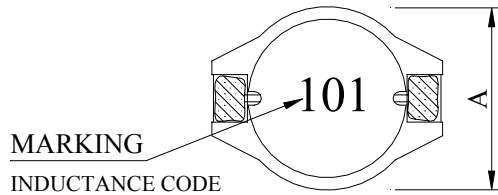


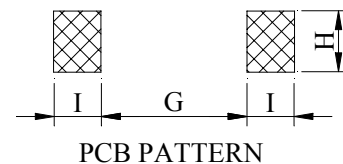
# PRODUCT SPECIFICATION

|                 |                                      |          |   |
|-----------------|--------------------------------------|----------|---|
| Product Name    | 5022 SMD POWER INDUCTORS - OPEN TYPE | Page     | 1 |
| TAMURA Part No. | TO5022-XXX                           | Rev. No. | 0 |

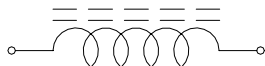
## 1.CONFIGURATION & DIMENSIONS :



|   |   |            |     |
|---|---|------------|-----|
| A | : | 15.00±0.3  | m/m |
| B | : | 18.40±0.3  | m/m |
| C | : | 7.00±0.5   | m/m |
| D | : | 2.40±0.2   | m/m |
| E | : | 2.20±0.2   | m/m |
| F | : | 13.30±0.3  | m/m |
| G | : | 12.70 REF. | m/m |
| H | : | 2.80 REF.  | m/m |
| I | : | 3.00 REF.  | m/m |



## 2. SCHEMATIC DIAGRAM :



## 3. GENERAL SPECIFICATION :

- TEMP. RISE : 40°C TYP.
- RATED CURRENT : BASE ON TEMP. RISE &  $\Delta$  LOA=10% TYP.
- STORAGE TEMP. : -40°C ~ +125°C
- OPERATING TEMP. : -25°C ~ +105°C
- RESISTANCE TO SOLDER HEAT : 260°C FOR 10 SECS.

# PRODUCT SPECIFICATION

|                 |                                      |          |   |
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## 4. ELECTRICAL CHARACTERISTICS :

| TAMURA Part No. | INDUCTANCE<br>( $\mu$ H) | TEST FREQ. ( HZ ) | SRF<br>( MHz )<br>TYP. | RDC<br>( mOhm )<br>MAX | IDC<br>( A ) |
|-----------------|--------------------------|-------------------|------------------------|------------------------|--------------|
|                 |                          | L                 |                        |                        |              |
| TO5022-1R0M     | 1.00 $\pm$ 20%           | 100K              | 80.0                   | 9                      | 8.60         |
| TO5022-2R2M     | 2.20 $\pm$ 20%           | 100K              | 80.0                   | 14                     | 7.10         |
| TO5022-3R3M     | 3.30 $\pm$ 20%           | 100K              | 60.0                   | 15                     | 6.20         |
| TO5022-5R6M     | 5.60 $\pm$ 20%           | 100K              | 40.0                   | 20                     | 5.30         |
| TO5022-100M     | 10.00 $\pm$ 20%          | 100K              | 30.0                   | 31                     | 4.30         |
| TO5022-150M     | 15.00 $\pm$ 20%          | 100K              | 22.0                   | 36                     | 4.00         |
| TO5022-220M     | 22.00 $\pm$ 20%          | 100K              | 20.0                   | 47                     | 3.50         |
| TO5022-330M     | 33.00 $\pm$ 20%          | 100K              | 15.0                   | 66                     | 3.00         |
| TO5022-470M     | 47.00 $\pm$ 20%          | 100K              | 9.0                    | 89                     | 2.60         |
| TO5022-680M     | 68.00 $\pm$ 20%          | 100K              | 8.0                    | 130                    | 2.30         |
| TO5022-101M     | 100.00 $\pm$ 20%         | 100K              | 7.0                    | 190                    | 1.80         |

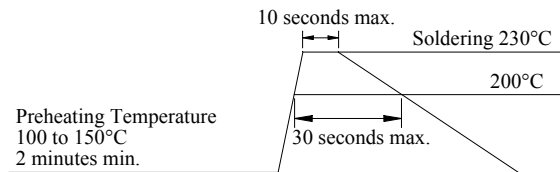


TAMURA

# PRODUCT SPECIFICATION

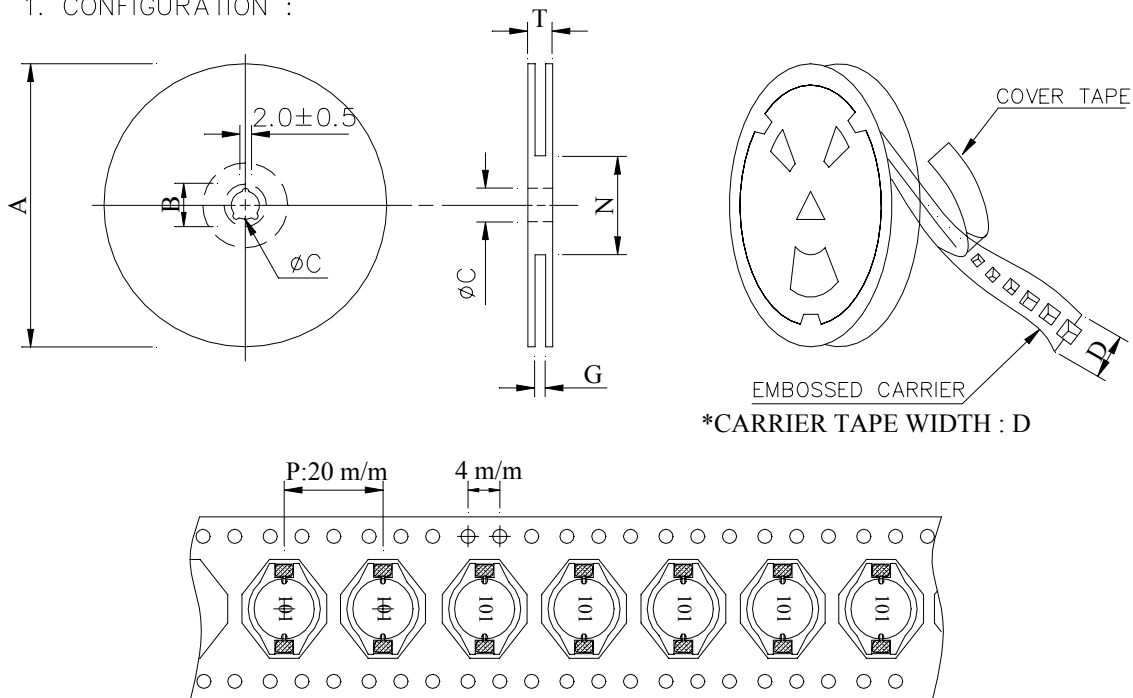
|               |                                      |          |   |
|---------------|--------------------------------------|----------|---|
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## RECOMMENDED SOLDERING CONDITIONS REFLOW SOLDERINGS



## PACKAGING INFORMATION :

### 1. CONFIGURATION :



### 2. DIMENSIONS : (m/m)

| STYLE   | A   | B      | C      | D  | G      | N       | T    |
|---------|-----|--------|--------|----|--------|---------|------|
| 13 - 32 | 330 | 21±0.8 | 13±0.5 | 32 | 34 MAX | 100 MIN | 38.4 |

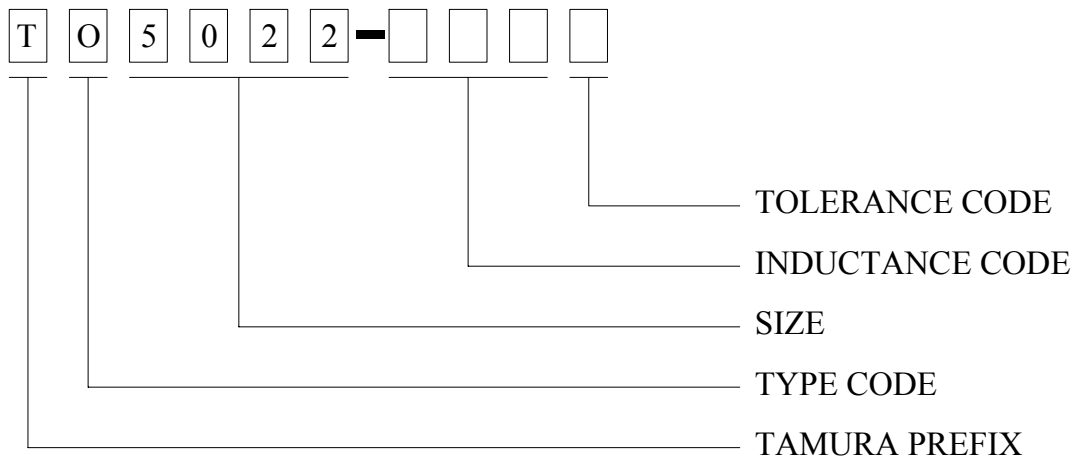
### 3. Q'TY & G.W. PER PACKAGE :

| SERIES | INNER : REEL |           |         | OUTER : CARTON |           |              |
|--------|--------------|-----------|---------|----------------|-----------|--------------|
|        | Q'TY (PCS)   | G.W. (gw) | STYLE   | Q'TY (PCS)     | G.W. (kg) | SIZE (cm)    |
| TO5022 | 250          | 1250      | 13 - 32 | 1000           | 6.1       | 40 x 20 x 26 |

# PRODUCT SPECIFICATION

|                 |                                      |          |   |
|-----------------|--------------------------------------|----------|---|
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## 6. Part No. FORMAT :



# PRODUCT SPECIFICATION

|                 |                                      |          |   |
|-----------------|--------------------------------------|----------|---|
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## 7. RELIABILITY TEST :

| TEST ITEM                                    | SPECIFICATION                                                                        | TEST CONDITION                                                                                                                                                                 |
|----------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SOLDERABILITY                                | MORE THAN 90% OF THE<br>TERMINAL ELECTRODE<br>SHALL BE COVERED<br>WITH FRESH SOLDER. | PREHEAT : 125±25°C FOR 60 SECONDS<br>SOLDER : H63A ( EUTECTIC SOLDER )<br>SOLDER TEMP. : 230±5°C<br>FLUX : ROSIN<br>DIP TIME : 4±1 SECONDS                                     |
| THERMAL SHOCK<br>TEST<br><br>( TEMP. CYCLE ) | INDUCTANCE SHALL<br>NOT CHANGE MORE<br>THAN ±20%                                     | ROOM TEMP. —————> $\frac{-25\pm 2^{\circ}\text{C}}{30 \text{ MINUTES}}$<br><br>ROOM TEMP. —————> $\frac{85\pm 2^{\circ}\text{C}}{30 \text{ MINUTES}}$<br><br>TOTAL : 50 CYCLES |
| HUMIDITY<br>RESISTANCE TEST                  |                                                                                      | TEMPERATURE : 40±2°C<br>HUMIDITY : 90 ~ 95%<br>APPLIED CURRENT : PER SPEC.<br>TIME : 500 HOURS                                                                                 |
| HIGH TEMP.<br>RESISTANCE TEST                |                                                                                      | TEMPERATURE : 85±2°C<br>APPLIED CURRENT : PER SPEC.<br>TIME : 500 HOURS                                                                                                        |