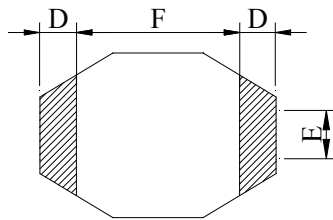
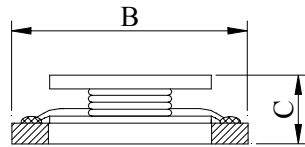
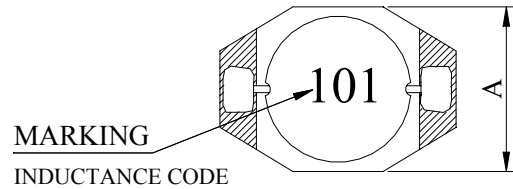


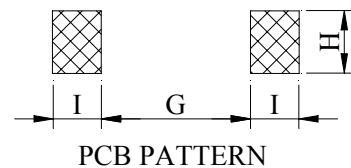
# PRODUCT SPECIFICATION

|                 |                                      |          |   |
|-----------------|--------------------------------------|----------|---|
| Product Name    | 1608 SMD POWER INDUCTORS - OPEN TYPE | Page     | 1 |
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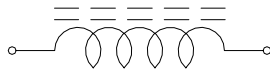
## 1.CONFIGURATION & DIMENSIONS :



|   |            |     |
|---|------------|-----|
| A | : 4.45 MAX | m/m |
| B | : 6.60 MAX | m/m |
| C | : 2.92 MAX | m/m |
| D | : 1.02±0.2 | m/m |
| E | : 1.27±0.2 | m/m |
| F | : 4.32±0.3 | m/m |
| G | : 4.06 REF | m/m |
| H | : 3.56 REF | m/m |
| I | : 1.40 REF | m/m |



## 2. SCHEMATIC DIAGRAM :



## 3. GENERAL SPECIFICATION :

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

# PRODUCT SPECIFICATION

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

| TAMURA Part No. | INDUCTANCE<br>( uH ) | TEST FREQ. ( HZ ) | SRF<br>( MHZ )<br>TYP. | RDC<br>( Ohm )<br>MAX | IDC<br>( A )<br>MAX |
|-----------------|----------------------|-------------------|------------------------|-----------------------|---------------------|
|                 |                      | L                 |                        |                       |                     |
| TO1608-1R0M     | 1.0±20%              | 100K              | 130.0                  | 0.05                  | 2.90                |
| TO1608-1R5M     | 1.5±20%              | 100K              | 115.0                  | 0.05                  | 2.80                |
| TO1608-2R2M     | 2.2±20%              | 100K              | 90.0                   | 0.07                  | 2.40                |
| TO1608-3R3M     | 3.3±20%              | 100K              | 70.0                   | 0.08                  | 2.00                |
| TO1608-4R7M     | 4.7±20%              | 100K              | 50.0                   | 0.09                  | 1.50                |
| TO1608-6R8M     | 6.8±20%              | 100K              | 45.0                   | 0.13                  | 1.40                |
| TO1608-100M     | 10.0±20%             | 100K              | 35.0                   | 0.16                  | 1.10                |
| TO1608-150M     | 15.0±20%             | 100K              | 30.0                   | 0.23                  | 1.00                |
| TO1608-220M     | 22.0±20%             | 100K              | 20.0                   | 0.37                  | 0.80                |
| TO1608-330M     | 33.0±20%             | 100K              | 15.0                   | 0.51                  | 0.60                |
| TO1608-470M     | 47.0±20%             | 100K              | 14.0                   | 0.86                  | 0.40                |
| TO1608-680M     | 68.0±20%             | 100K              | 11.0                   | 1.27                  | 0.30                |
| TO1608-101M     | 100.0±20%            | 100K              | 9.0                    | 1.27                  | 0.30                |
| TO1608-151M     | 150.0±20%            | 100K              | 6.0                    | 2.00                  | 0.25                |
| TO1608-221M     | 220.0±20%            | 100K              | 5.5                    | 3.11                  | 0.20                |
| TO1608-331M     | 330.0±20%            | 100K              | 5.0                    | 3.80                  | 0.16                |
| TO1608-471M     | 470.0±20%            | 100K              | 4.0                    | 5.06                  | 0.15                |
| TO1608-681M     | 680.0±20%            | 100K              | 3.0                    | 9.20                  | 0.12                |
| TO1608-102M     | 1000.0±20%           | 100K              | 2.0                    | 13.80                 | 0.07                |

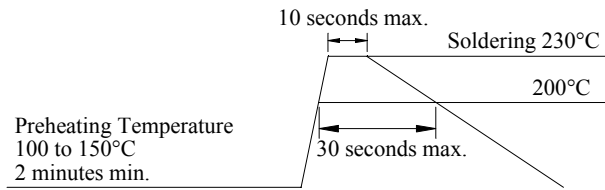


TAMURA

# PRODUCT SPECIFICATION

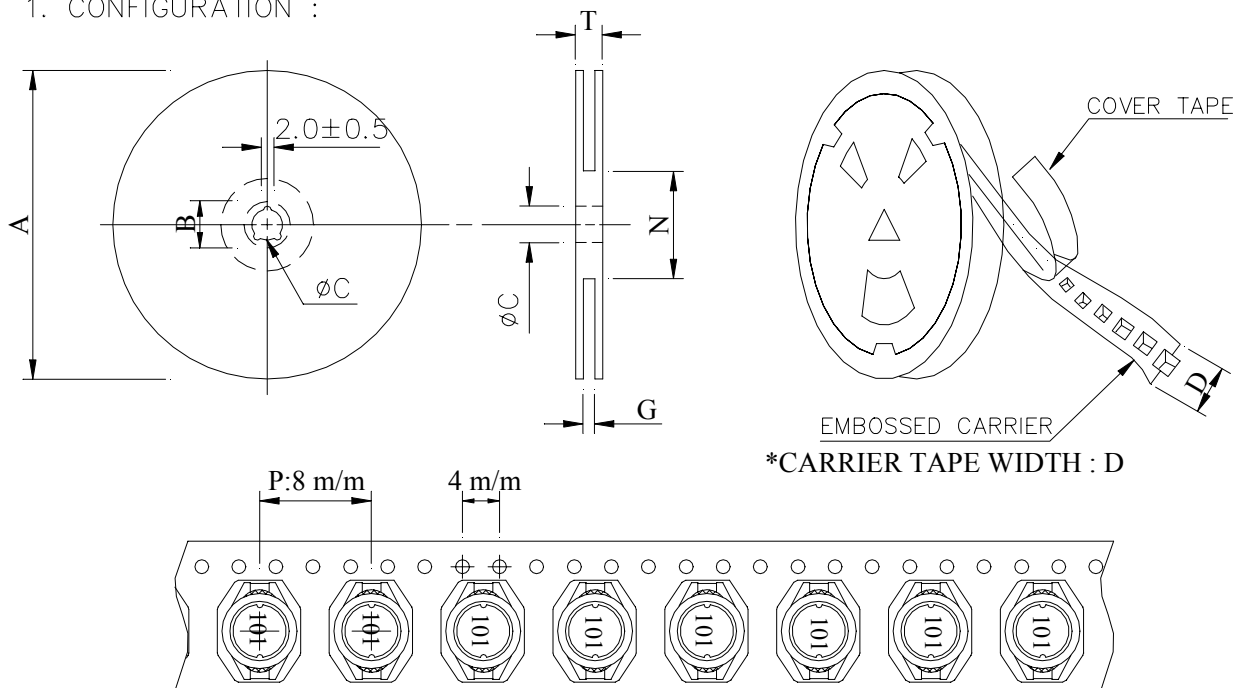
|                 |                                      |          |   |
|-----------------|--------------------------------------|----------|---|
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## RECOMMENDED SOLDERING CONDITIONS REFLOW SOLDERINGS



## 5. PACKAGING INFORMATION :

### 1. CONFIGURATION :



### ( 2 ) DIMENSIONS

Unit:m/m

| STYLE   | A   | B  | C  | D  | G    | N       | T    |
|---------|-----|----|----|----|------|---------|------|
| 13 - 12 | 330 | 21 | 13 | 12 | 12.4 | 100 MIN | 18.4 |

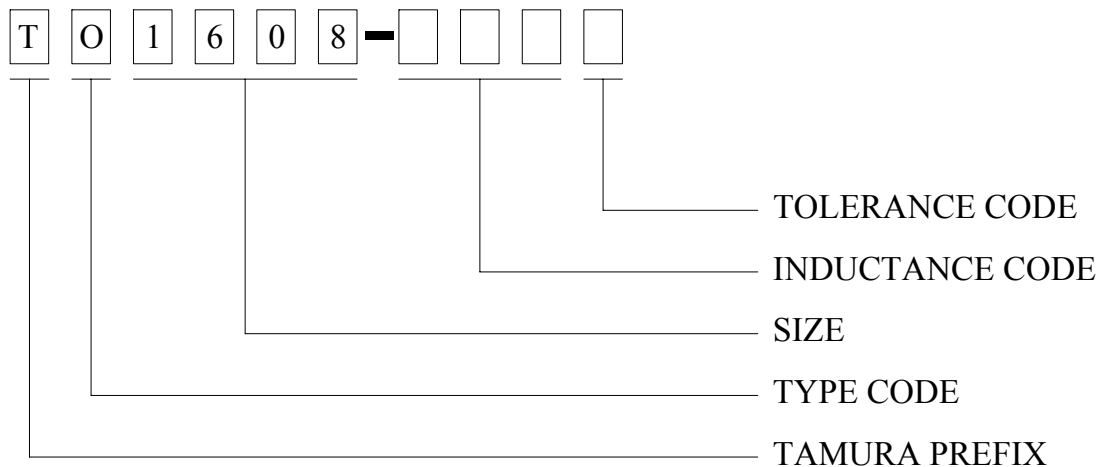
### ( 3 ) Q'TY & G.W. PER PACKAGE

| SERIES | INNER : REEL |           |         | OUTER : CARTON |           |              |
|--------|--------------|-----------|---------|----------------|-----------|--------------|
|        | Q'TY (PCS)   | G.W. (gw) | STYLE   | Q'TY (PCS)     | G.W. (Kg) | SIZE (cm)    |
| TO1608 | 2,500        | 825       | 13 - 12 | 30,000         | 10.5      | 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 : $125 \pm 25^{\circ}\text{C}$ FOR 60 SECONDS<br>SOLDER : H63A ( EUTECTIC SOLDER )<br>SOLDER TEMP. : $230 \pm 5^{\circ}\text{C}$<br>FLUX : ROSIN<br>DIP TIME : $4 \pm 1$ SECONDS                                                                                                                                               |
| THERMAL SHOCK<br>TEST<br><br>( TEMP. CYCLE ) | INDUCTANCE SHALL<br>NOT CHANGE MORE<br>THAN $\pm 20\%$                               | <div>ROOM TEMP. <math>\longrightarrow</math> <math>-25 \pm 2^{\circ}\text{C}</math></div> <div>15 MINUTES <math>\longrightarrow</math> 30 MINUTES</div><br><div>ROOM TEMP. <math>\longrightarrow</math> <math>85 \pm 2^{\circ}\text{C}</math></div> <div>15 MINUTES <math>\longrightarrow</math> 30 MINUTES</div><br>TOTAL : 50 CYCLES |
| HUMIDITY<br>RESISTANCE TEST                  |                                                                                      | TEMPERATURE : $40 \pm 2^{\circ}\text{C}$<br>HUMIDITY : 90 ~ 95%<br>APPLIED CURRENT : PER SPEC.<br>TIME : 500 HOURS                                                                                                                                                                                                                     |
| HIGH TEMP.<br>RESISTANCE TEST                |                                                                                      | TEMPERATURE : $85 \pm 2^{\circ}\text{C}$<br>APPLIED CURRENT : PER SPEC.<br>TIME : 500 HOURS                                                                                                                                                                                                                                            |