



## Size 20161A

### FEATURES

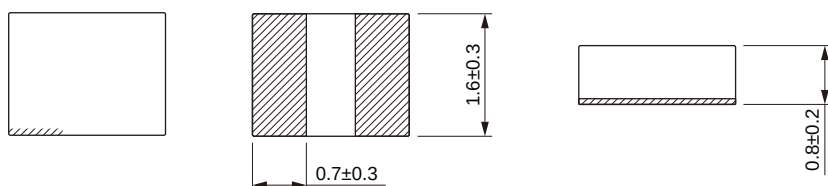
- High current, low DCR, high efficiency.
- Very low acoustic noise and very low leakage flux noise.
- AEC-Q200 qualified
- 100% Lead(Pb)-Free and RoHS compliant.
- Operating temperature: -55 to +155 °C (including self-temperature rise)
- Quantity: 3000PCS

### APPLICATION

- ADAS
- Headlamps, tail lamps and interior lighting
- HVAC
- Doors, window lift and seat control
- Audio subsystem
- Digital instrument cluster
- In-Vehicle Infotainment and navigation

Dimensions: [mm]

Land Pattern: [mm]



### Electrical Properties:

| Part No         | Inductance<br>@ 100KHz/1V<br>(μH) | Tolerance | Temperature<br>Rise Current<br>Typ.<br>(A) | Temperature<br>Rise Current<br>Max.<br>(A) | Saturation<br>Current<br>Typ.<br>(A) | Saturation<br>Current<br>Max.<br>(A) | DC<br>Resistance<br>Typ.<br>(mΩ) | DC<br>Resistance<br>Max.<br>(mΩ) |
|-----------------|-----------------------------------|-----------|--------------------------------------------|--------------------------------------------|--------------------------------------|--------------------------------------|----------------------------------|----------------------------------|
| MDTA20161A-R24M | 0.24                              | ±20%      | 6.8                                        | 6.2                                        | 7.3                                  | 7.0                                  | 15                               | 18                               |
| MDTA20161A-R33M | 0.33                              | ±20%      | 6.5                                        | 6.0                                        | 7.0                                  | 6.5                                  | 17                               | 20                               |
| MDTA20161A-R47M | 0.47                              | ±20%      | 6.0                                        | 5.5                                        | 6.3                                  | 5.5                                  | 19                               | 22                               |
| MDTA20161A-R68M | 0.68                              | ±20%      | 5.0                                        | 4.5                                        | 5.2                                  | 4.7                                  | 24                               | 31                               |
| MDTA20161A-1R0M | 1.00                              | ±20%      | 4.0                                        | 3.7                                        | 4.8                                  | 4.2                                  | 38                               | 46                               |





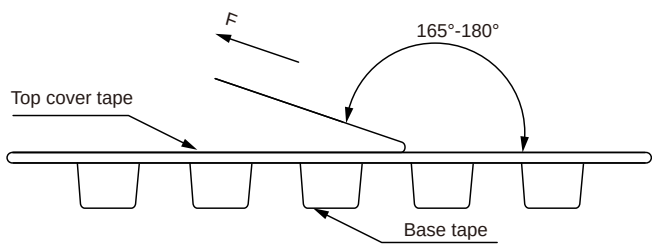
# Soldering Reflow:

## Packaging Information:

Tape Dimension:

| Series     | A0<br>(mm) | B0<br>(mm) | D<br>(mm) | P0<br>(mm) | P1<br>(mm) | W<br>(mm) | K0<br>(mm) | E<br>(mm)  | T<br>(mm)   |
|------------|------------|------------|-----------|------------|------------|-----------|------------|------------|-------------|
| MDTA20161A | 1.9 ± 0.1  | 2.3 ± 0.1  | 1.5 ± 0.1 | 4.0 ± 0.1  | 4 ± 0.1    | 8.0 ± 0.3 | 1.2 ± 0.1  | 1.75 ± 0.1 | 0.25 ± 0.05 |

Peel force of top cover tape:



The peel force of top cover tape shall be between 0.1 to 0.98 N



Reel Dimension: [mm]



## Cautions and Warnings:

### Storage Conditions:

- The storage period is within 12 months after the completion of production. Be sure to follow the storage conditions (temperature: -5 to 35°C, humidity: 75% RH Max). If the storage period elapses, the soldering of the terminal electrodes may deteriorate. The warranty period is one year.
- Product should not be exposed to environment with high temperature, high humidity, dust, corrosive gas and etc.
- Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
- Please always handle products carefully to prevent any damage caused by dropping down or inappropriate removing.

### Operation Instructions:

- Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.
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