

## TO-247 (100W)

### Construction



|                     |           |
|---------------------|-----------|
| ① Alumina Substrate | ③ Lead    |
| ② Resistor Layer    | ④ Molding |



### Features

- 100 Watts at 25°C case temperature heat sink mounted
- TO-247 style power package
- Single M3 screw mounting to heat sink
- Molded case for protection and easy to mount
- Electrically isolated case
- Non-Inductive design

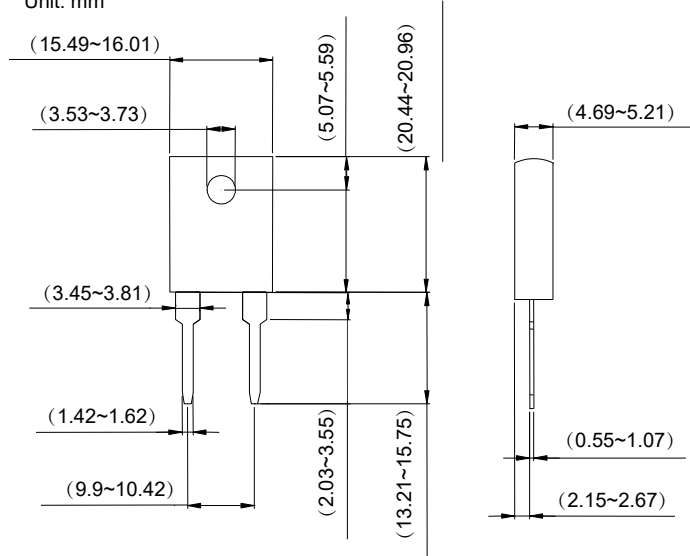
### Applications

- Gate Resistors in Power Supplies
- Snubbers
- Load and Dumping Resistors in CRT Monitors
- Terminal Resistance in RF Power Amplifier
- Voltage Regulation
- Low Energy Pulse Loading
- UPS

### Dimensions

| Type  | Weight (g)<br>(1000pcs) |
|-------|-------------------------|
| TR100 | 3381                    |

Unit: mm



### Part Numbering

| T0    | 247 | 100W | 15R  | 5%                                   |   |
|-------|-----|------|--|--------------------------------------|---|
| ↓     | ↓   | ↓    | ↓  | ↓                                    | ↓ |
| 产品类别  | 封装  | 功率   | 阻值   | 精度                                   |   |
| 大功率电阻 | 247 | 100W | R100: 0.1Ω<br>0100: 10Ω<br>4700: 470Ω<br>1001: 1000Ω<br>1002: 10000Ω | D=±0.5%<br>F=±1%<br>J=±5%<br>K: ±10% |   |



# TO-247大功率电阻系列规格书

|      |            |
|------|------------|
| 系列号  | TO-247     |
| 修订日期 | 2022-04-25 |
| 版本号  | Ho-A0      |

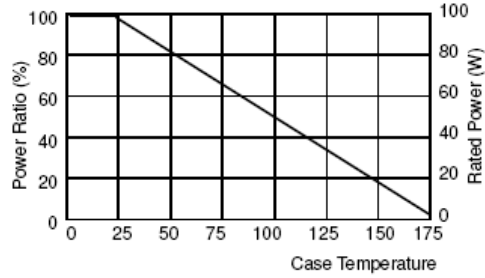
## TO-247 (100W)

### Electrical Characteristics Specifications

| Resistance Range | TCR (PPM/°C)        |                     |                     |
|------------------|---------------------|---------------------|---------------------|
|                  | ±1%                 | ±5%                 | ±10%                |
| 0.05Ω - 1Ω       |                     | —                   | —                   |
| >1Ω - 3Ω         | ±300                |                     |                     |
| >3Ω - 10Ω        | ±100<br>±200        | ±100<br>±200        | ±100<br>±200        |
| >10Ω - 10KΩ      | ±50<br>±100<br>±200 | ±50<br>±100<br>±200 | ±50<br>±100<br>±200 |

- Operating Voltage: 350V Max.
- Dielectric Strength: 1800V AC
- Insulation Resistance: 10GΩ min.
- Working Temperature Range: -65°C to +175°C

### Derating Curve



### Environmental Characteristics

| Item   | Requirement       | Test Method  |
|--|-------------------|--|
| Temperature Coefficient of Resistance (T.C.R.) | As Spec.          | Referenced to 25°C, ΔR taken at +105°C                     |
| Load Life                                      | ΔR±1.0%           | Rated power, 2,000 hours                                   |
| Solderability                                  | 90% min. coverage | 245±5°C for 3 seconds                                      |
| Momentary Overload                             | ΔR±0.5%           | 1.5 times rated power and V (dc) ≤ 1.5V Max. for 5 seconds |
| Dielectric strength                            | ΔR±0.15%          | 1800v AC, 60 seconds                                       |
| Moisture resistance                            | ΔR±0.5%           | -10°C~+65°C, RH>90%, cycle 240 hours                       |
| Thermal Shock                                  | ΔR±0.5%           | -65°C~150°C, 100 cycles                                    |
| Terminal Strength                              | ΔR±0.2%           | (Pull Test) 2.4N   |
| Vibration, High Frequency                      | ΔR±0.4%           | 20g peak   |

- Lead Material: Tinned Copper
- When in Free Air at 25°C, the TR100 is Rated for 3.5W
- The Case Temperature is to be used for the Definition of the Applied Power Limit
- The Case Temperature Measurement must be made with a Thermocouple Contacting the Center of the Component mounted on the Designed Heat Sink
- Thermal Grease should be Applied Properly.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Thick Film Resistors - Through Hole](#) category:*

*Click to view products by [Milliohm](#) manufacturer:*

Other Similar products are found below :

[M8340104K3300GCD03](#) [M8340105K3300GGD03](#) [M8340105K3922FGD03](#) [M8340107K2401GCD03](#) [M8340109K1002JCD03](#)

[M8340109K1003GCD03](#) [MP850-3.00-1%](#) [ARC3.11 2M J A](#) [M8340105K1003GCD03](#) [M8340105M2201GCD03](#) [M8340107M7501GCD03](#)

[M8340108K2051FCD03](#) [M8340108K7501GCD03](#) [M8340108M5100JGD03](#) [M8340109K1000GCD03](#) [MOX-GRD-001](#)

[M8340102M4701GBD04](#) [M8340102K1002GBD04](#) [M8340109K2002GGD03](#) [M8340108K2002FGD03](#) [OE1305](#) [MS-221-82R5](#) [MOX-](#)

[750231004DE](#) [MOX-4-127505J](#) [SM102034504FE](#) [MOX300002206FE](#) [MOX-400233004F](#) [MOX300001005BE](#) [SM104066008J](#) [MOX-](#)

[400262008PE](#) [MOX-400232506FE](#) [MOX-400234007FE](#) [MOX-400221006G](#) [MOX-750235006ME](#) [SM103032506FE](#) [SM202022005FE](#)

[MOX1125231002FE](#) [MOX-1-122504F](#) [MOX-400225003F](#) [MOX1125731008FE](#) [MOX-5-126002JE](#) [MS176-2.20M-1%](#) [MOX-830212453BE](#)

[TRHE01A270RJ2E](#) [TRHE01A560RJ2E](#) [TRHP01A200RF2E](#) [TRHP01A5001F2E](#) [MG715-2.40M-1%](#) [MS214-20.0K-1%](#) [MF0W4FF4702A50](#)