

POWER THICK FILM RESISTORS

LTO 100 and LTO 150

100 W and 150 W TO-247 Thick Film Power Resistors



KEY BENEFITS

- TO-247 easy mounting package
- Up to 150 W power dissipation capability at 45 °C case temperature (heatsink cooled)
- High pulse capability i.e. 4.5 J for 1 ms pulse / 57 J for 0.1 s pulse, allowing engineers to use less resistors in equipment
- Reduces the need to cool the resistive device and allows engineers to use fewer resistors
- AEC-Q200 full qualification. Long term reliability is improved
- High dielectric strength up to 3000 V_{RMS}

APPLICATIONS

- Automotive
- Avionics, military
- Industrial

RESOURCES

- Datasheet: LTO 100 <u>www.vishay.com/doc?50051</u>
 LTO 150 <u>www.vishay.com/doc?50071</u>
- For technical questions contact <u>sfer@vishay.com</u>
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912









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FEATURES

- Case temperature heatsink mounted: 100 W at 25 °C (LTO 100), 150 W at 45 °C (LTO 150)
- Direct mounting ceramic on heatsink
- Broad resistance range: 0.015 Ω to 1 M Ω (LTO 100), 0.03 Ω to 1.3 M Ω (LTO 150)
- Non inductive
- TO-247 package: compact and easy to mount
- Designed for clip mounting (LTO 150)
- UL 94 V-0 material used Compliant with EN45545-2 (LTO 150)
- AEC-Q200 qualified

LTO 100	LTO 150	
DIMENSIONS in millimeters		
3.6 → 15.76 3.6 → 1.5 → 14.5 1.5 → 10.16	3.6 15.76 3.6 10.16	R2

Note

• Tolerance unless stated: ± 0.3 mm

MECHANICAL SPECIFICATIONSMechanical ProtectionMoldedResistive ElementThick filmSubstrateAluminaConnectionsTinned copperWeight3.5 g max.Mounting Torqure1 Nm

STANDARD ELECTRICAL SPECIFICATIONS		
Size	TO-247	
Resistance Range (Ω)	0.015 to 1 M	
Rated Power P _{25 °C} (W)	100	
Limiting Element Voltage U _L (V)	500	
Tolerance (± %)	1, 2, 5, 10	
Temperature Coefficient (± ppm/°C)	200, 350, 900	
Critical Resistance (Ω)	2.5 K	

MECHANICAL SPECIFICATIONS

Mechanical ProtectionMoldedResistive ElementThick filmSubstrateAluminaConnectionsTinned copperWeight4 g max.Clip Assembly Force60 N to 110 N

STANDARD ELECTRICAL SPECIFICATIONS		
Size	TO-247	
Resistance Range (Ω)	0.03 to 1.3 M	
Rated Power P _{25 °C} (W)	150	
Limiting Element Voltage U _L (V)	500	
Tolerance (± %)	1, 2, 5, 10	
Temperature Coefficient (± ppm/°C)	200, 350, 900	
Critical Resistance (Ω)	1.66 K	

Revision 15-Feb-18

Revision 16-Nov-17