

Series LXP 18 TO 220

18 Watt Thick Film Power Resistors for High Frequency and Pulse Loading Applications

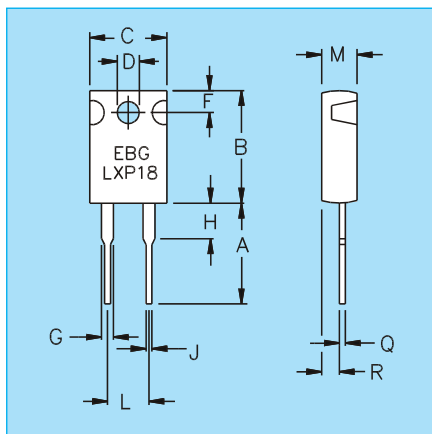
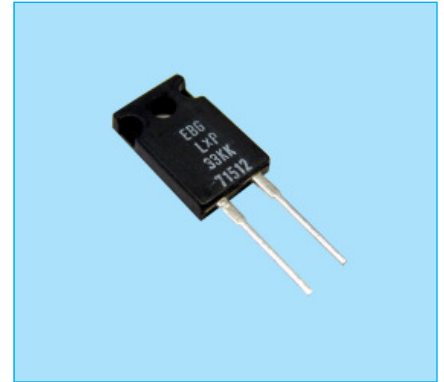
EBG offers the totally encapsulated and insulated TO-220 package for low ohmic value and non-inductive design for high frequency and pulsing applications. Ideal use is for power supplies. This series is rated at 18 Watts mounted to a heat sink.

The special features include:

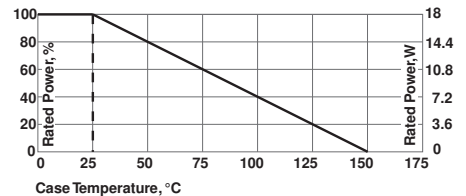
- 18 Watt power rating at 25°C case temperature
- TO-220 package configuration
- Single screw mounting simplifies attachment to the heat sink.
- A totally molded housing for environmental protection.
- Non-Inductive design
- Resistor package totally insulated from heat sink.

Specifications:

- Resistance Range: 0.05Ω to 1MΩ other values on request
- Resistance Tolerance: ±1%, ±2%, ±5%, ±10% (0.5% on request)
- Temperature Coefficient: 10Ω and above, ±50ppm/°C, referenced to 25°C, ΔR taken at +105°C. Between 1Ω and 10Ω, ±(100ppm+0.002Ω)/°C, referenced to 25°C, ΔR taken at +105°C
- Max. Operating Voltage: 350 V
- Dielectric Strength: 1,800VAC
- Power Rating: 18 W at 25°C. Depends upon case temperature. See Derating Curve.
- Insulation Resistance: 10 GΩ min.
- Momentary Overload: 2 times rated power with applied voltage not to exceed 1.5 times maximum continuous operating voltage for 5 seconds, ΔR ± (0.3% + 0.001Ω) max.
- Load Life: MIL-R-39009, 2,000 hours at rated power, ΔR ±(1.0% + 0.001Ω).
- Moisture Resistance: MIL-Std-202, Method 106, ΔR ±(0.5% + 0.001Ω) max.
- Thermal Shock: MIL-Std-202, Method 107, Cond. F, ΔR ±(0.3%+0.001Ω) max.
- Terminal Strength: MIL-Std-202, Method 211, Cond. A (Pull Test) 2.4N., ΔR ±(0.2% + 0.001Ω) max.
- Vibration, High Frequency: MIL-Std-202, Method 204, Cond. D, ΔR ±(0.2% + 0.001Ω) max.
- Lead Material: Tinned Copper
- Max. Torque: Using a screw and a compression washer mounting technique is 0.9 Nm
- For pulse power details, please see page 32 (datasheet UXP-300)!



Dim.	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	11.43	13.97	0.450	0.550
B	16.00	16.52	0.630	0.650
C	10.15	10.67	0.400	0.420
D	3.08	3.28	0.121	0.129
F	2.92	3.44	0.115	0.135
G	1.14	1.40	0.045	0.055
H	2.54	4.06	0.100	0.160
J	0.66	0.86	0.026	0.034
L	4.82	5.34	0.190	0.210
M	2.92	3.44	0.115	0.135
Q	0.40	0.60	0.016	0.024
R	1.52	2.04	0.060	0.080



Derating (thermal resistance): 0.144W/°K (6.94K/W). Without a heatsink, when in free air at 25°C, the LXP18 is rated for 2.25W. Derating for temp. above 25°C is 0.018W/°K.

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.

In the above spec sheet, you will find our standard product, please contact your local manufacturing representative or call us direct to find out details of other options available regarding this style. Please see our website for the most updated information!