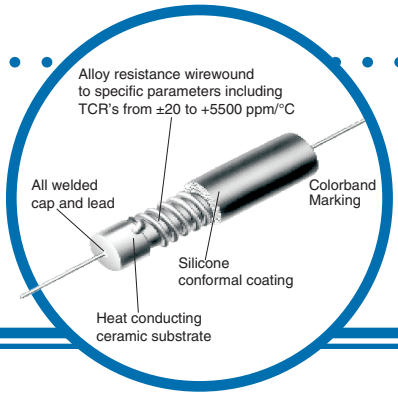
# Low Cost Semi-Precision Power Wirewound Resistor

**LAS Series**

- 1 and 3 watts
- 0.1 ohm to 18K ohms
- Color band identification
- ±5%, ±3%, ±1%, ±.5% tolerance
- Resistance wire TCR ±20 ppm/°C
- RoHS-compliant version available




## Electrical Data

| IRC Type | Power Rating 275°C Max. Hot Spot | | Commercial Range (ohms) | | Non-Inductive Range (ohms) | | Available Resistance (ohms) | |
|---|---|---|---|---|---|---|---|---|
| | 125°C | 25°C | Min. | Max. | Min. | Max. | 0.5%, 1% | 3%, 5% |
| LAS-1 | 1 | 2 | 0.1 | 7.5K | 0.1 | 3.8K | 1 - 7.5K | 0.1 - 7.5K |
| LAS-3 | 2 | 3 | 0.1 | 18K | 0.2 | 7.5K | 1 - 18K | 0.1 - 18K |

## Environmental Data

| Test Condition (@ 25°C) | Max ΔR |
|---|---|
| Load Life 1000 hours | 1.0% |
| Moisture Resistance | 1.0% |
| Temperature Cycle | 0.5% |
| Short Time Overload | 0.5% |
| Low Temperature Operation | 0.5% |
| Solder Heat | 0.25% |
| Shock | 0.5% |
| Vibration | 0.5% |

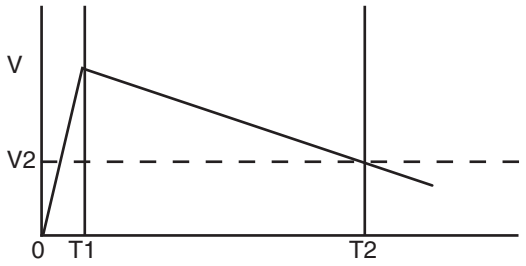
**LAS-3 Carbon Comp Replacement (contact factory)**

The LAS-3 is a three watt conformal coated precision wirewound resistor. The resistance wire is welded to the end caps and wound on alumina rod for good thermal conductivity. In circuit applications that utilize two watt carbon comp resistors the LAS-3 is an idead effective replacement. The LAS-3 5.6 ohm can be specifically designed to withstand 22 joules of energy delivered by a 1000 volt 10 x 1000 usec wave shape pulse.

Special LAS-3 5.6 ohm to 100 ohm will meet Telecom GR-1089 lightning requirements.

- V = 1000 volts
- T1 = 10 usec rise
- T2 = 1000 usec to V2
- 10 ohm output impedance

**LIGHTNING SURGE**




**MICROSECONDS**

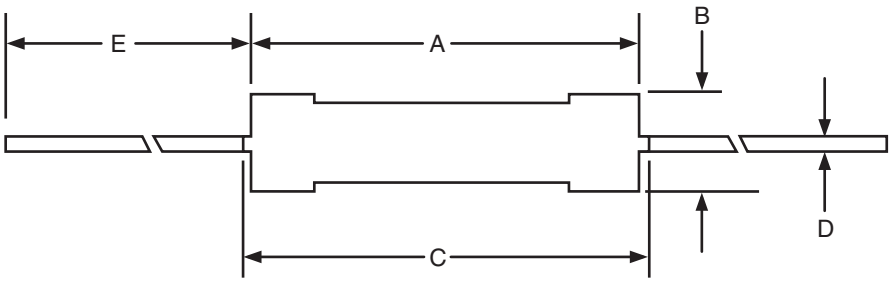
**General Note**
IRC reserves the right to make changes in product specification without notice or liability.
All information is subject to IRC's own data and is considered accurate at time of going to print.

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A subsidiary of
TT electronics plc

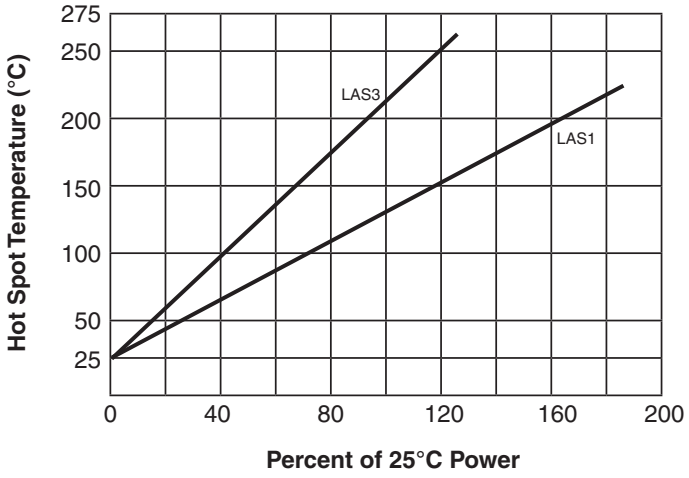
# Low Cost Semi-Precision Power Wirewound Resistor

## Physical Data

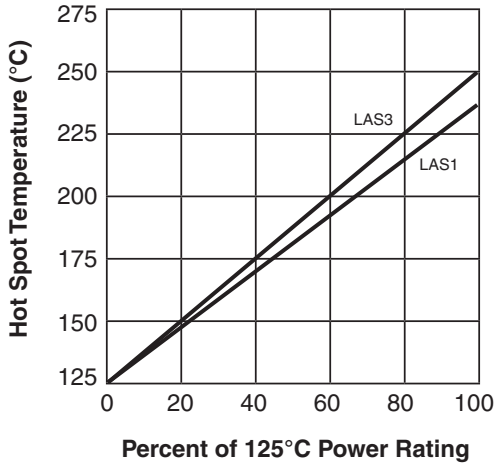



| Dimensions (Inches (mm)) | | | | | |
|---|---|---|---|---|---|
| **IRC Type** | **A ±0.032** | **B (max)** | **C (max)** | **D (Lead Diameter)** | **E (Lead length Min)** |
| **LAS-1** | 0.348 (8.84) | 0.110 (2.80) | 0.407 (10.34) | 0.020 (0.53) | 1.475 (37.5) |
| **LAS-3** | 0.491 (12.47) | 0.149 (3.80) | 0.550 (13.99) | 0.032 (0.81) | 1.35 (34.3) |

## Hot Spot Temperature @ 25°C

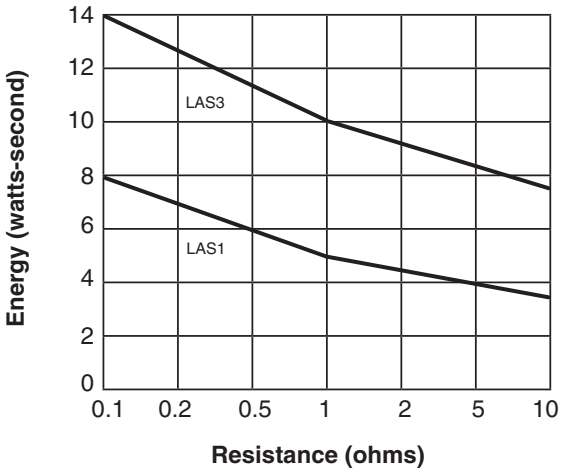



## Hot Spot Temperature @ 125°C

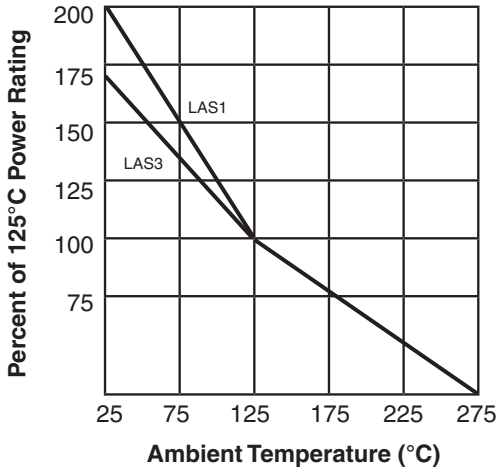


# Low Cost Semi-Precision Power Wirewound Resistor

## Pulse-Handling Capability @ 25°C




## Power Derating Curve




## Ordering Data

**Sample Part No.** LAS - 3 2001 J LF

**Type**
LAS

**Power**
3 = 3 watts
1 = 1 watt

**Resistance Value**
Expressed in ohms
(Standard EIA/MIL Values)

**Tolerance**
J = ±5%, H = ±3%, F = ±1%, D = ±0.5%

**Lead-Free Construction**