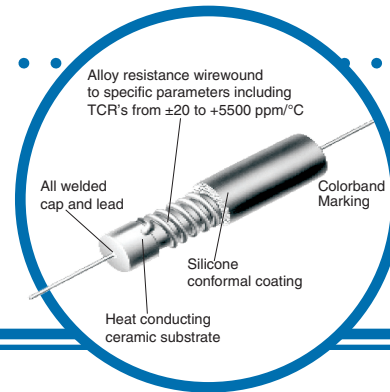


# Low Cost Semi-Precision Power Wirewound Resistor



## LAS Series

- 1 and 3 watts
- 0.1 ohm to 18K ohms
- Color band identification
- $\pm 5\%$ ,  $\pm 3\%$ ,  $\pm 1\%$ ,  $\pm .5\%$  tolerance
- Resistance wire TCR  $\pm 20$  ppm/ $^{\circ}\text{C}$
- 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 $\Delta R$
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%

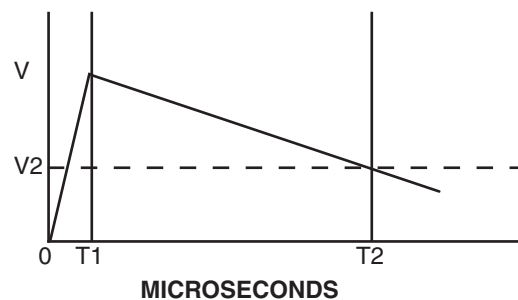
### LAS-3 Carbon Comp Replacement (contact factory)

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 ideal 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



### 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.

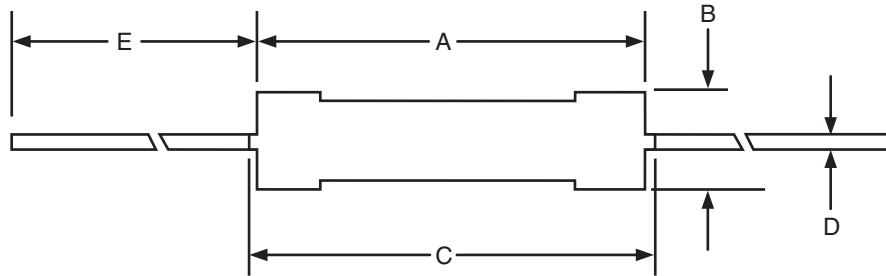
Wire and Film Technologies Division • 4222 South Staples Street • Corpus Christi Texas 78411 USA  
Telephone: 361 992 7900 • Facsimile: 361 992 3377 • Website: www.ircct.com



# Low Cost Semi-Precision Power Wirewound Resistor



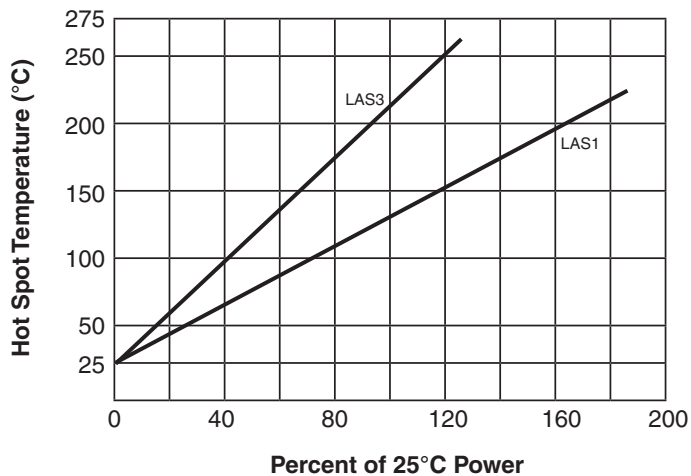
## Physical Data



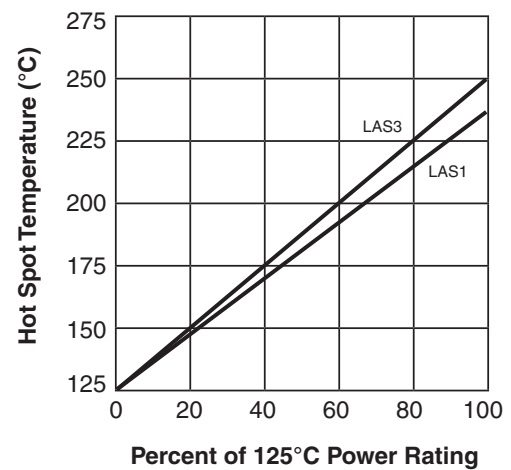
Dimensions (Inches (mm))

IRC Type	A $\pm 0.032$	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



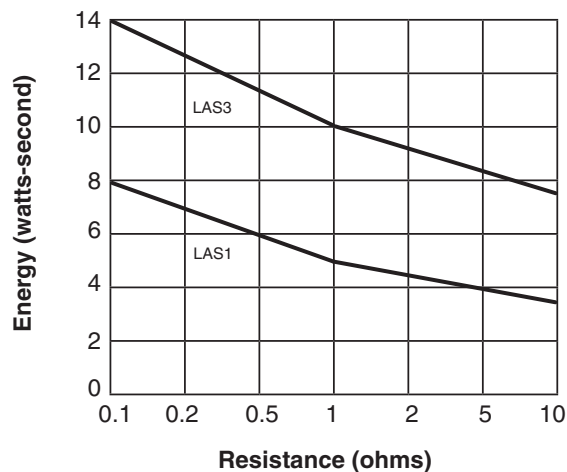
## Hot Spot Temperature @ 125°C



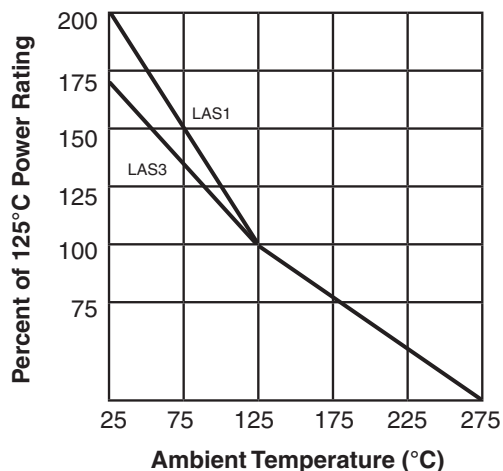
# Low Cost Semi-Precision Power Wirewound Resistor



## 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 • .....						