# **IS** Series

## **Ultra Low Profile Power Resistors**

## **FEATURES**

- Heatsinkable
- Low profile
- High power
- Pulse handling capability
- Non-flammable
- Low inductances
- Rugged construction
- Ultra low profile thickfilm on steel
- 175W to 270W sizes
- Single fixing heatsink mountable
- Available with fast-on terminals or wire leads





#### USES

- · Braking resistors
- In-rush current limiter
- Bleeder resistor
- Power switching
- Soft charging

Stainless Steel

## SERIES SPECIFICATIONS

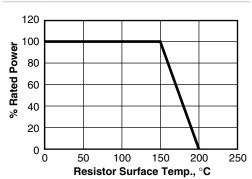
	Power Rating	Resistance Range	
Type	(watts)	$(\Omega)$	Tolerance
IS175	175	$5\Omega$ to $10K\Omega$	10%, 20%
IS200	200	$5\Omega$ to $10K\Omega$	10%, 20%
IS250	250	$5\Omega$ to $10K\Omega$	10%, 20%
IS270	270	$5\Omega$ to $10K\Omega$	10%, 20%



#### CHARACTERISTICS

TCR	<250ppm (surface temp less than 150°C)		
Maximum element temperature	365°C		
Working voltage	Not to exceed 300V		
Over-voltage rating	5X rated power for up to for up to 1 second		
Resistive element	Film		
Derating	element surface temp. at 100% to 0% power at 200°C surface temp.		
Power rating	dependent on mounting and heatsink thermal capacity		
Hot spot surface temperature	200°C max.		
Pulsed load at full pulse power rating 1,000 cycles	Max. 1%ΔR; (see Fig 1) Mounted on a 0.06°C/W heatsink with forced air cooling, air temperature 25°C (ref AH32430 12" long)		
Solder	Silver solder is recommended for IS Series resistors. Leaching of the silver in the termination will occur if non-silver solder is used. 60/40 tin-lead solders are not recommended for use with the IS Series product.		
Screw torque	3.5 Nm		

## **Derating**



## THIS PRODUCT IS **DESIGNED FOR USE WITH** PROPER HEATSINKING.

Maximum base plate temperature of the resistor must be monitored and kept within specified limits to establish the power rating. Best technique is to attach a thermocouple to the side of the base plate of the resistor.

(continued)

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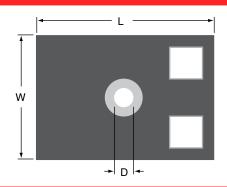
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#### DIMENSIONS

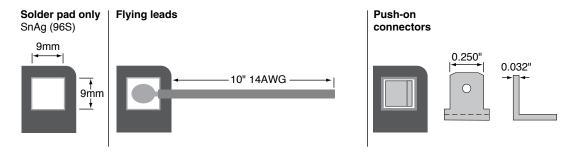
(in/mm)

Thickness: 0.050 in. ±.015 / 1.27mm

Туре	Wattage	L ±0.2mm	W ±0.2mm	ØD nom.	Wt. nom (oz/g)
IS175	175	1.94/49.30	1.41/35.90	0.13/3.20	0.44/12.60
IS200	200	2.40/61.00	1.60/40.60	0.21/5.30	0.60/17.10
IS250	250	4.00/101.60	2.76/70.00	0.21/5.30	1.78/50.80
IS270	270	4.80/122.00	2.76/70.00	0.21/5.30	2.12/60.70



### TERMINATION OPTIONS



### ORDERING INFORMATION

