

Aluminium Housed Power Resistors



nics Type THS Series

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Tyco are the leading European supplier of standard and custom designed aluminium housed resistors for general-purpose use, power supplies, power generation and the traction industry.

The THS is a range of extremely stable, high quality wire wound resistors capable of dissipating high power in a limited space with relatively low surface temperature. The power is rapidly dissipated as heat through the aluminium housing to a specified heatsink.

The resistors are made from quality materials for optimum reliability and stability. Tyco can test resistors to conform to relevant international, MIL or customer specifications.

Key Features

- Established product with proven reliability
 - Leading the way with over 50 years of design and manufacturing experience
- 10 Watts to 75 Watts
- Versatile product
 - Bench mark in every industry

Applications

- Braking Resistor
- Balancing Resistor
- Capacitor Charging & Discharging
- Crowbar
- Filter
- Electrical Machinery general use
- Available through Distribution

Characteristics - Electrical THS - 10 Watts to 75 Watts

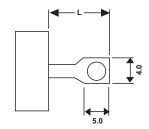
	THS10	THS15	THS25	THS50	THS75
Dissipation @ 25°C with Heatsink (Watts):	10	15	25	50	75
Without Heatsink:	5.5	8	12.5	20	40
Ohmic Value Min (Ohms):	R01	R01	R01	R01	R05
Max:	10K	15K	36K	50K	50K
Max. Working Voltage (DC or ACrms) Volts:	160	265	550	1250	1400
Dielectric Strength (AC Peak) Volts:	1400	1400	2500	2500	5000
Stability (% resistance change, 1000 hours)	(%): 1	1	1	1	2
Standard Heatsink - Area (mm²):	41500	41500	53500	53500	99500
Thickness (mm):	1	1	1	1	3
Number of Mounting Holes:	2 hole	2 hole	2 hole	2 hole	4 hole

Characteristics - Electrical

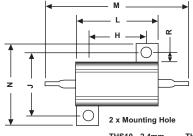
Long Term Stability:	For improvements in long-term stability, resistors must be derated as follows; for 50% of stated ΔR maximum dissipation must not exceed 70% of rating; for 25% of stated ΔR maximum, dissipation must not exceed 50% of rating
Insulation Resistance:	Dry: $10,000M\Omega$ minimum. After moisture test: $1000M\Omega$ minimum.
Heat Dissipation:	Although the use of proprietary heat sinks with lower thermal resistance is acceptable, up rating is not recommended. The use of proprietary heat sink compound to improve thermal conductivity is recommended for optimum performance of all sizes
Specification:	Temperature coefficient below 100R, 50ppm/°C
	Temperature coefficient above 100R, 30ppm/°C
	Tolerance, 5% standard

Product Specifications - THS10 - THS75

Type	L
THS10, 15	7
THS25, 50	10
THS75	8



Dimensions -THS10 - THS50



THS10 - 2.4mm THS25 - 3.3mm THS15 - 2.4mm THS50 - 3.3mm

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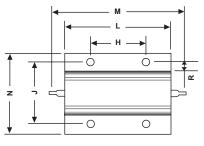
Туре	H±0.3	J±0.3	L Max	M Max	N Max	P Max	R Min	T±0.5	U Max
THS10	11.3	12.4	17.0	30.0	17.0	9.0	1.9	3.4	2.5
THS15	14.3	15.9	21.0	36.5	21.0	11.0	1.9	5.2	3.2
THS25	18.3	19.8	29.0	51.8	28.0	15.0	2.8	7.2	3.2
THS50	39.7	21.4	51.0	72.5	30.0	17.0	2.8	7.9	3.2





Type THS Series

Dimensions -**THS75**

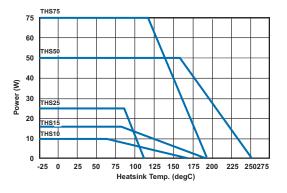




4 x Mounting Hole HSC75 - 4.4mm

Туре	H±0.3	J±0.3	K±0.2	L Max	M Max	N Max	P Max	R Min	T±0.5	U Max
THS75	29.0	37.0	4 4	49.0	71.0	47.5	26.0	5.0	11.5	3.5

Derating Curve THS10 to THS75

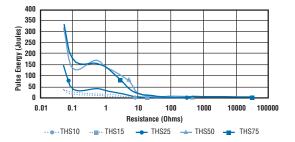


Pulse Energy THS10 to THS75

Dimensions are in

millimetres unless

otherwise specified.

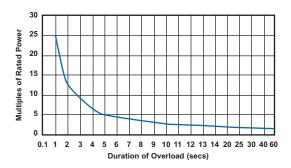






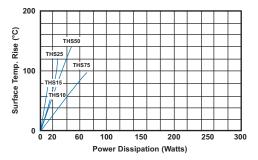
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Power Overload

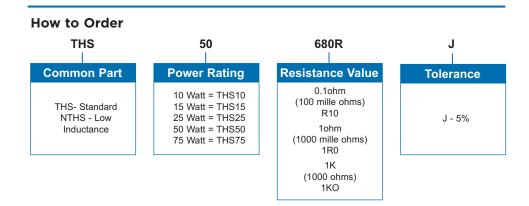


This graph indicates the amount that the rated power (at 20° C) of the standard HS Series resistor may be increased for overloads of 100mS to 60S

Surface Temperature Rise



For resistor mounted on standard heatsink, related to power dissipation



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TE Connectivity:

THS50-22R5 THS1010RJ THS1015RJ THS101R0J THS102R0J THS102R7J THS103R9J THS104R7J THS1050RJ THS1068RJ THS10R05J THS10R22J THS1512RJ THS1515RJ THS152R2J THS153K3J THS1556RJ THS155R10J THS2510RJ THS2515RJ THS2518RJ THS251R0J THS251R0J THS25220RJ THS2522RJ THS2527RJ THS252R0J THS2533RJ THS254R7J THS258R2J THS25R05J THS25R22J THS25R68J THS5010RJ THS5010KJ THS5010RJ THS5012RJ THS5015RJ THS50180RJ THS501K5J THS501R2J THS501R5J THS501R5J THS501R5J THS501R5J THS502R0J THS5050KJ THS5050RJ THS5050KJ THS5047KJ THS558RJ THS5047KJ THS5560KJ THS1020RJ THS5047KJ THS5047KJ THS550KJ THS5050KJ THS50682RJ THS10753RJ THS50810J TH