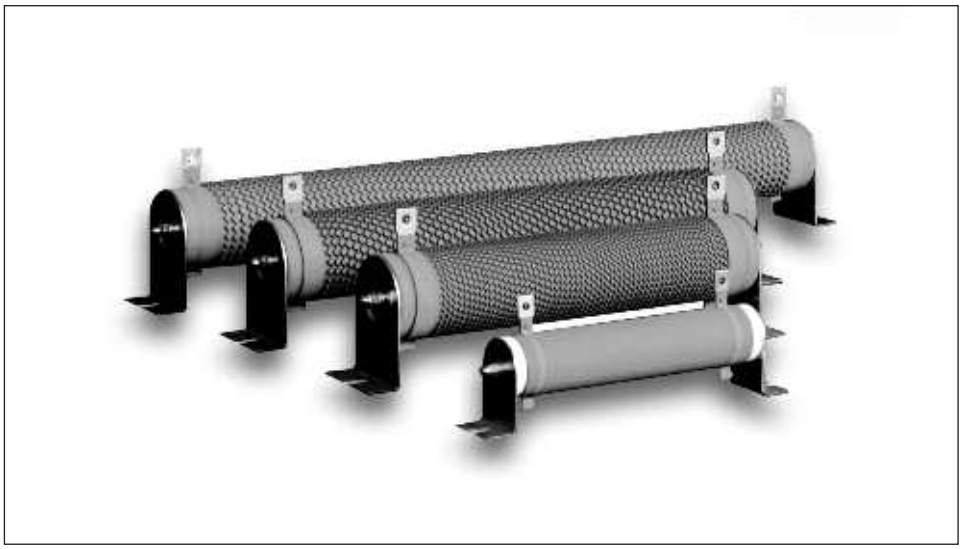
Type TE Series

Key Features

- Mullite Coated
- Up to 2500W Power Rating
- Corrugated Ribbon Element for Rapid Cooling
- 3x Overload for 5 Seconds
- Custom Terminations / Leads Available
- Flameproof Construction

Applications

- Large Electrical and Production Machinery
- Load Test Simulation
- Motor Start/Stop Cycles
- Dynamic Braking
- Equipment Discharge



TE Connectivity is a leading supplier of standard and custom-designed power resistors for industrial, control and general- purpose applications.

The TE range of Mullite coated tubular ceramic core resistors have a corrugated ribbon element for rapid cooling effect to enable up to 2500W power handling capability. Designed for heavy duty machinery, electrical equipment, motor control etc. requiring stability and reliability.

Test Method - Electrical

Test Item	Specification	Test Details
Life (Moisture Load):	40°C 95% RH 1000 hour on-off cycle	ΔR ±3.0%
Short Term Overload:	3 x rated wattage, 5 seconds	-
Flammability:	16x rated power, 5 minutes	No Flames
Insulation Resistance:	DC 500V	Over 100MΩ
Voltage Resistibility:	AC 2500V 1 minute	Free of damage or flying arc
Resistor Strength:	200N, 30 seconds	Free of visible damage
Terminal Strength:	Ual: 45N, 30 seconds	Free of visible damage R ≤ ± (1%R + 0.05Ω)

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

Type TE Series

Specifications- Electrical

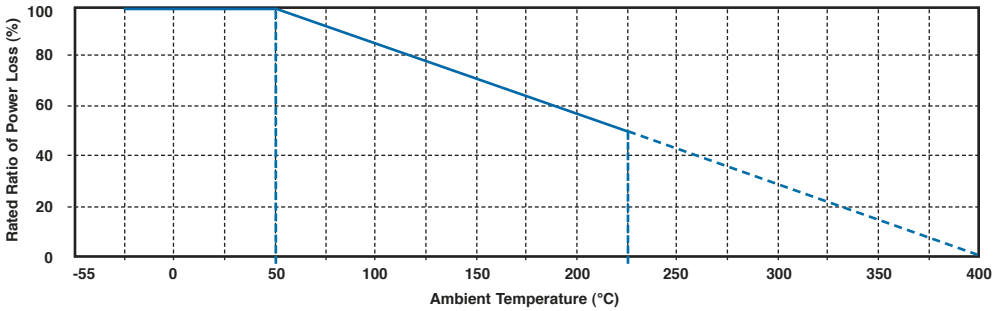
Resistance Range (Ohms)	See Resistance Range Chart below
Selection Series	E12
Tolerance	+/-5%, +/-10% as per Resistance Range Chart below

Type	Resistance Value	Tolerance
50W	R10 – R99	10%
	1R0 – 2K7	5%
60W	R10 – R99	10%
	1R0 – 2K7	5%
80W	R10 – R99	10%
	1R0 – 2K7	5%
100W	1R0 – 2K7	5%
120W	1R0 – 2K7	5%
150W	1R0 – 2K7	5%
200W	1R0 – 2K7	5%
300W	1R0 – 2K7	5%
400W	1R0 – 2K7	5%
500W	1R0 – 2K7	5%
600W	1R0 – 2K7	5%
750W	1R0 – 2K7	5%
1000W	1R0 – 2K7	5%
1200W	1R0 – 2K7	5%
1500W	1R0 – 2K7	5%
2000W	1R0 – 2K7	5%
2500W	1R0 – 2K7	5%

Characteristics - Environmental

Temperature Coefficient of Resistance:	Within ±440ppm/°C
Rated Power Free Air:	50 to 2500 Watts
Operating Temperature Range	-25°C to +225°C

Derating Curve



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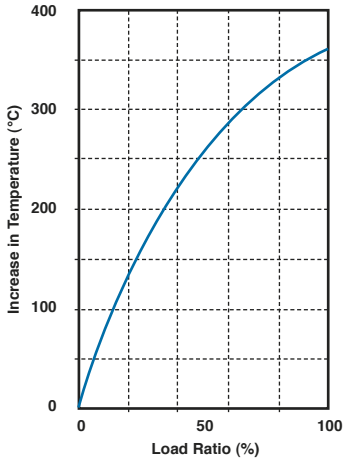
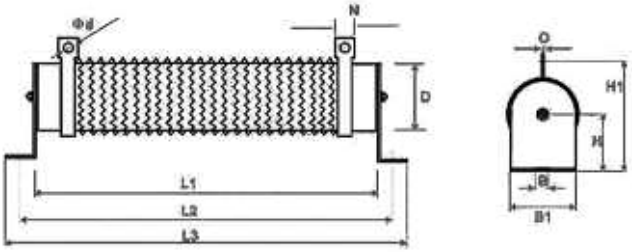
Type TE Series

Temperature Rise



Dimensions



Rated Power (W)	Dimensions										
	L1 (±2)	L2 (±5)	L3 (±3)	D (±2)	B	B1	H	H1 (±3)	N	d	O
50	102	124	146	28	6.5	28	28	61	10	4.5	1.2
60	102	124	146	28	6.5	28	28	61	10	4.5	1.2
80	152	174	196	28	6.5	28	28	61	10	4.5	1.2
100	182	204	226	28	6.5	28	28	61	10	4.5	1.2
120	182	204	226	28	6.5	28	28	61	10	4.5	1.2
150	195	217	239	40	8	40	41	81	12	5.5	2.0
200	195	217	239	40	8	40	41	81	12	5.5	2.0
300	282	304	326	40	8	40	41	81	12	5.5	2.0
400	282	304	326	40	8	40	41	81	12	5.5	2.0
500	316	338	360	50	8	50	45	101	16	6	2.0
600	345	367	389	40	8	40	41	81	12	5.5	2.0
750	316	338	360	50	8	50	45	101	16	6	2.0
1000	300	325	350	60	8.5	60	60	119	16	6	2.0
1200	415	440	465	60	8.5	60	60	119	16	6	2.0
1500	415	440	465	60	8.5	60	60	119	16	6	2.0
2000	510	535	560	60	8.5	60	60	119	16	6	2.0
2500	600	625	650	60	8.5	60	60	119	16	6	2.0

How to Order

TE	50	B	1K0	J
Common Part	**Power Rating**	**Mounting**	**Resistance Value**	**Tolerance**
TE - High Power Wire Wound Resistor	50 - 50 Watt 60 - 60 Watt 80 - 80 Watt 100 - 100 Watt etc.	A - Without Bracket B - With Bracket (Standard)	1 ohm (1000 milliohms) 1R0 10 ohm (10 ohms) 10R 100R ohms (100 ohms) 100R 1k ohms (1000 ohms) 1K0	J - ±5% K - ±10%

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