Required Power Rating	Mounting	Precision	Temperature Range	Frequency	Power	Selected Resistor Type	Range of Nominal Value
Less than 1/8 Watt	SMT	-	-	-	N/A	SMD, Thin Film SMD, Thick Film SMD	-
Less than 1/8 Watt	Through Hole	Tolerance 0.01% to 2% Acceptable	Up to 250°C	-	N/A	Metal Film	Few Milliohms to 68 MΩ
Less than 1/8 Watt	Through Hole	Tolerance as low as 0.005% Required	Up to 170°C	-	N/A	Foil Resistors	Few Milliohms to 500 KΩ
1/8 Watt to 2 Watt	SMT	-	-	-	N/A	SMD, Thin Film SMD, Thick Film SMD	-
1/8 Watt to 2 Watt	Through Hole	Tolerance 5% to 20% Acceptable	Up to 125°C	-	N/A	Carbon Composition	1Ω to 22MΩ
1/8 Watt to 2 Watt	Through Hole	Tolerance 5% to 20% Acceptable	Up to 450°C	-	N/A	Metal Oxide Film Resistors	Up to 3Tohms
1/8 Watt to 2 Watt	Through Hole	Tolerance 5% to 20% Acceptable	Up to 350°C	-	N/A	Thin Film Through Hole or Thick Film Through Hole	Up to 10Tohms
1/8 Watt to 2 Watt	Through Hole	Tolerance 5% up to 10% Acceptable	Up to 250°C	-	Robust	Ceramic Composition	3.3Ω to 1 MΩ
1/8 Watt to 2 Watt	Through Hole	Tolerance 2% to 5% Acceptable	Up to 155°C	Less than 250MHz	N/A	Carbon Film	1Ω to 22MΩ
1/8 Watt to 2 Watt	Through Hole	Tolerance 2% to 5% Acceptable	Up to 170°C	-	Robust	Foil Resistor	2mΩ to 500 kΩ
1/8 Watt to 2 Watt	Through Hole	Tolerance 2% to 5% Acceptable	Up to 275°C	-	Robust	Thick Film Through Hole	Few Milliohms to 100GΩ
1/8 Watt to 2 Watt	Through Hole	Tolerance 2% to 5% Acceptable	Up to 400°C	Less than 50KHz	Power Applications	Wirewound	Few Milliohms to 357 kΩ

1/8 Watt to 2 Watt	Through Hole	Tolerance 2% to 5% Acceptable	Up to 450°C	-	Power Pulse Applications	Metal Oxide Film Resistor	Few Milliohms to 3Tohms
1/8 Watt to 2 Watt	Through Hole	Tolerance as low as 0.5% required	Up to 450°C	-	Power Pulse Applications	Metal Oxide Film Resistor	Few Milliohms to 3Tohms
1/8 Watt to 2 Watt	Through Hole	Tolerance as low as 0.01% required	Up to 250°C	-	N/A	Metal Film	Few Milliohms to 68 MΩ
1/8 Watt to 2 Watt	Through Hole	Tolerance as low as 0.005% required	Up to 170°C	-	Robust	Foil Resistor	2mΩ to 500 kΩ
2 Watt to 5 Watt	SMT	-	-	-	-	SMD, Thin Film SMD, Thick Film SMD	-
2 Watt to 5 Watt	Through Hole	Tolerance 5% to 20% Acceptable	Up to 450°C	-	Power Pulse Applications	Metal Oxide Film	Few Milliohms to 3Tohms
2 Watt to 5 Watt	Through Hole	Tolerance 5% to 20% Acceptable	Up to 350°C	-	Robust	Cermet	Few Micro-ohms to 10Tohms
2 Watt to 5 Watt	Through Hole	Tolerance 2% to 5% Acceptable	Up to 170°C	-	N/A	Foil	2mΩ to 500 kΩ
2 Watt to 5 Watt	Through Hole	Tolerance 2% to 5% Acceptable	Up to 350°C	High Frequency	Robust	Cermet (Thin Film SMD, Thick Film SMD)	Few Micro-ohms to 10Tohms
2 Watt to 5 Watt	Through Hole	Tolerance 2% to 5% Acceptable	Up to 400°C	Less than 50KHz	Power Applications	Wirewound	400 uΩ to 560kΩ
2 Watt to 5 Watt	Through Hole	Tolerance 2% to 5% Acceptable	Up to 450°C	-	Power Pulse Applications	Metal Oxide Film	Few Milliohms to 3Tohms
2 Watt to 5 Watt	Through Hole	Tolerance up to 2% Acceptable	Up to 250°C	-	Not Suitable	Metal Film	Few Milliohms to 68 MΩ
2 Watt to 5 Watt	Through Hole	Tolerance up to 2% Acceptable	Up to 170°C	-	N/A	Foil	2mΩ to 500 kΩ

2 Watt to 5 Watt	Through Hole	Tolerance up to 2% Acceptable	Up to 350°C	High Frequency	Robust	Cermet (Thin Film SMD, Thick Film SMD)	Few Micro-ohms to 10Tohms
2 Watt to 5 Watt	Through Hole	Tolerance up to 2% Acceptable	Up to 400°C	Less than 50KHz	Power Applications	Wirewound	400 uΩ to 560kΩ
2 Watt to 5 Watt	Through Hole	Tolerance up to 2% Acceptable	Up to 450°C	-	Power Pulse Applications	Metal Oxide Film	Few Milliohms to 3Tohms
2 Watt to 5 Watt	Through Hole	Tolerance as low as 0.5% required	Up to 450°C	-	Power Pulse Applications	Metal Oxide Film	Few Milliohms to 3Tohms
2 Watt to 5 Watt	Through Hole	Tolerance as low as 0.01% Required	Up to 250°C	-	Not Suitable	Metal Film	Few Milliohms to 68 MΩ
2 Watt to 5 Watt	Through Hole	Tolerance as low as 0.01% Required	Up to 400°C	Less than 50KHz	Power Applications	Wirewound	400 uΩ to 560kΩ
2 Watt to 5 Watt	Through Hole	Tolerance as low as 0.01% Required	Up to 350°C	High Frequency	Robust	Cermet	Few Micro-ohms to 10Tohms
2 Watt to 5 Watt	Through Hole	Tolerance as low as 0.005% required	Up to 170°C	-	Robust	Foil	2mΩ to 500 kΩ
5 Watt to 10 Watt	SMT	-	-	Less than 50KHz	Power Applications	Wirewound	-
5 Watt to 10 Watt	SMT	-	-	High Frequency	-	Cermet (Thin Film SMD, Thick Film SMD)	-
5 Watt to 10 Watt	Through Hole	Tolerance 5% to 20% Acceptable	Up to 350°C	High Frequency	N/A	Cermet	Few Micro-ohms to 10Tohms
5 Watt to 10 Watt	Through Hole	Tolerance 5% to 20% Acceptable	Up to 450°C	-	Power Pulse Applications	Metal Oxide	Few Micro-ohms to 3Tohms

5 Watt to 10 Watt	Through Hole	Tolerance 2% to 5% Acceptable	Up to 400°C	Less than 50KHz	Power Applications	Wirewound	400 uΩ to 560kΩ
5 Watt to 10 Watt	Through Hole	Tolerance 2% to 5% Acceptable	Up to 350°C	High Frequency Applications	Robust	Cermet (Thin Film Through Hole, Thick Film Through Hole)	Few Micro-ohms to 10Tohms
5 Watt to 10 Watt	Through Hole	Tolerance 2% to 5% Acceptable	Up to 450°C	-	Power Pulse Applications	Metal Oxide	Few Milliohms to 3Tohms
5 Watt to 10 Watt	Through Hole	Tolerance 2% to 5% Acceptable	Up to 170°C	-	Robust	Foil	2mΩ to 500 kΩ
5 Watt to 10 Watt	Through Hole	Tolerance up to 2% Acceptable	Up to 250°C	-	Not Suitable	Metal Film	Few Milliohms to 68 MΩ
5 Watt to 10 Watt	Through Hole	Tolerance as low as 0.5% required	Up to 450°C	-	Power Pulse Applications	Metal Oxide	Few Micro-ohms to 3Tohms
5 Watt to 10 Watt	Through Hole	Tolerance as low as 0.01% required	Up to 400°C	Less than 50KHz	Power Applications	Wirewound	400 uΩ to 560kΩ
5 Watt to 10 Watt	Through Hole	Tolerance as low as 0.01% required	Up to 350°C	High Frequency Applications	Robust	Cermet	Few Micro-ohms to 10Tohms
5 Watt to 10 Watt	Through Hole	Tolerance as low as 0.01% required	Up to 250°C	-	Not Suitable	Metal Film	Few Milliohms to 68 MΩ
5 Watt to 10 Watt	Through Hole	Tolerance as low as 0.005% required	Up to 170°C	-	Robust	Foil	2mΩ to 500 kΩ
10 Watt to 20 Watt	SMT	-	-	High Frequency	-	Cermet (Thin Film SMD, Thick Film SMD)	-

10 Watt to 20 Watt	SMT	-	-	Less than 50KHz	Power Applications	Wirewound SMT	-
10 Watt to 20 Watt	Through Hole	Tolerance up to 20% Acceptable	Up to 350°C	High Frequency Applications	-	Cermet	Few Micro-ohms to 10Tohms
10 Watt to 20 Watt	Through Hole	Tolerance up to 20% Acceptable	Up to 450°C	-	Power Pulse Applications	Metal Oxide	Few Milliohms to 3Tohms
10 Watt to 20 Watt	Through Hole	Tolerance up to 5% Acceptable	Up to 400°C	Less than 50KHz	Power Applications	Wirewound	400 uΩ to 560kΩ
10 Watt to 20 Watt	Through Hole	Tolerance up to 2% Acceptable	Up to 250°C	-	Not Suitable	Metal Film	Few Milliohms to 68 MΩ
20 Watt to 140 Watt	SMT	-	-	High Frequency Applications	-	Cermet	Few Micro-ohms to 10Tohms
20 Watt to 140 Watt	SMT	-	-	Not Suitable	Power Applications	Wirewound	400 uΩ to 560kΩ
20 Watt to 140 Watt	Through Hole	Tolerance up to 20% Acceptable	Up to 450°C	-	Pulse Power Applications	Metal Oxide Film	Few Milliohms to 3Tohms
20 Watt to 140 Watt	Through Hole	Tolerance up to 20% Acceptable	Up to 350°C	High Frequency Applications	-	Cermet (Thin Film Through hole & Thick Film Through Hole)	Few Micro-ohms to 10Tohms
20 Watt to 140 Watt	Through Hole	Tolerance up to 5% Acceptable	Up to 400°C	Not Suitable	Power Applications	Wirewound	400 uΩ to 560kΩ
140 Watt to 450 Watt	SMT/Through Hole	Tolerance up to 20% Acceptable	Up to 350°C	High Frequency Applications	-	Cermet (Thin Film & Thick Film)	Few Micro-ohms to 10Tohms
140 Watt to 450 Watt	SMT/Through Hole	Tolerance up to 5% Acceptable	Up to 400°C	Not Suitable	Power Applications	Wirewound	400 uΩ to 560kΩ
More than 450 Watt	SMT/Through Hole	Tolerance up to 5% Acceptable	Up to 400°C	Not Suitable	High Power Applications	Wirewound	400 uΩ to 560kΩ