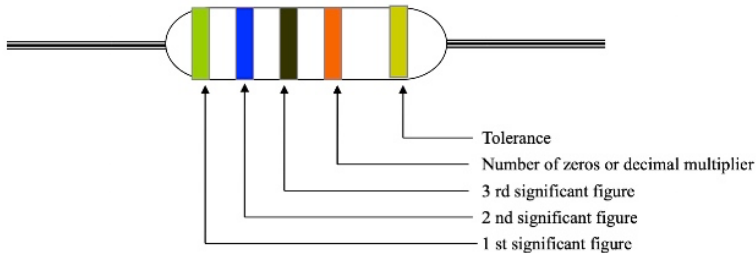


## 2000 pcs Metal Film Resistors Set 500 mW Part No. 23P130



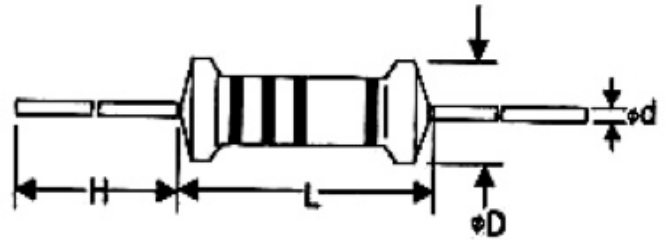
### Resistor color code



#### Color refer

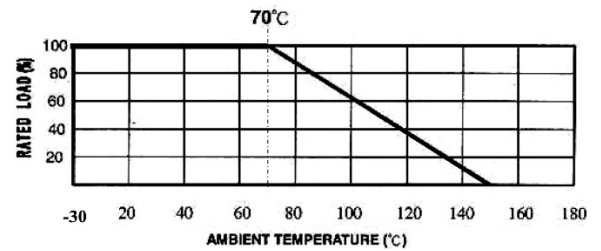
Color	1 st Band	2 nd Band	3 rd Band	4 th Band	Tolerance
Black	0	0	0	$10^0$	
Brown	1	1	1	$10^1$	±1.00 %
Red	2	2	2	$10^2$	
Orange	3	3	3	$10^3$	
Yellow	4	4	4	$10^4$	
Green	5	5	5	$10^5$	±0.50 %
Blue	6	6	6	$10^6$	±0.25 %
Violet	7	7	7	$10^7$	±0.10 %
Grey	8	8	8	$10^8$	
White	9	9	9	$10^9$	
Gold				$10^{-1}$	
Silver				$10^{-2}$	

### Resistor dimensions



$$L = 9.0 \pm 0.1 \text{ mm} / D = 3.5 \pm 0.5 \text{ mm} / H = 26 \pm 2 \text{ mm} / d = 0.58 \text{ mm}$$

### Derating @ high temperature



**Technical data:** Rated power: 0.5 W (Derating from  $T_a=70^\circ\text{C}$ ) • Tolerance: 1% • Temp.-range:  $-30 \dots 150^\circ\text{C}$  • Working voltage: 350 V • Dielectric withstanding/overload voltage: max. 700 V • Temp. Coefficient max  $\pm 100 \text{ ppm}/^\circ\text{C}$  • Solder ability: Dip the lead in to a solder bath having a Temperature of  $260^\circ\text{C} \pm 5^\circ\text{C}$  up to  $4 \pm 0.8 \text{ mm}$  from the body of the resistor and hold it for  $5 \pm 0.5$  seconds then inspect. Content 100 pcs. per value: 1 $\Omega$ , 10 $\Omega$ , 47 $\Omega$ , 100 $\Omega$ , 150 $\Omega$ , 220 $\Omega$ , 330 $\Omega$ , 470 $\Omega$ , 1k $\Omega$ , 1.5k $\Omega$ , 2.2k $\Omega$ , 4.7k $\Omega$ , 10k $\Omega$ , 22k $\Omega$ , 33k $\Omega$ , 47k $\Omega$ , 100k $\Omega$ , 220k $\Omega$ , 470k $\Omega$ , 1M $\Omega$  • Bending tool • Vitrometer.

### Substitute / Refill Packs are available:

Part No.	Resistor Value	Content
22P081	1, 10, 47, 100, 150, 220, 330, 470, 1k, 1.5k, 2.2k, 4.7k, 10k, 22k, 33k, 47k, 100k, 220k, 470k, 1M $\Omega$	200 pcs. (10/each)
22P082	1, 10, 47, 100, 150, 220, 330, 470, 1k, 1.5k, 2.2k, 4.7k, 10k, 22k, 33k, 47k, 100k, 220k, 470k, 1M $\Omega$	500 pcs. (25/each)
22P083	1, 10, 47, 100, 150, 220, 330, 470, 1k, 1.5k, 2.2k, 4.7k, 10k, 22k, 33k, 47k, 100k, 220k, 470k, 1M $\Omega$	1000 pcs. (50/each)
22P084	1 $\Omega$	100 pcs.
22P085	10 $\Omega$	100 pcs.
22P086	47 $\Omega$	100 pcs.
22P087	100 $\Omega$	100 pcs.
22P088	150 $\Omega$	100 pcs.
22P089	220 $\Omega$	100 pcs.

Part No.	Resistor Value	Content
22P090	330 $\Omega$	100 pcs.
22P091	470 $\Omega$	100 pcs.
22P092	1 k $\Omega$	100 pcs.
22P093	1.5 k $\Omega$	100 pcs.
22P094	2.2 k $\Omega$	100 pcs.
22P095	4.7 k $\Omega$	100 pcs.
22P096	10 k $\Omega$	100 pcs.
22P097	22 k $\Omega$	100 pcs.
22P098	33 k $\Omega$	100 pcs.
22P099	47 k $\Omega$	100 pcs.
22P100	100 k $\Omega$	100 pcs.
22P101	220 k $\Omega$	100 pcs.
22P102	470 k $\Omega$	100 pcs.
22P103	1 M $\Omega$	100 pcs.