

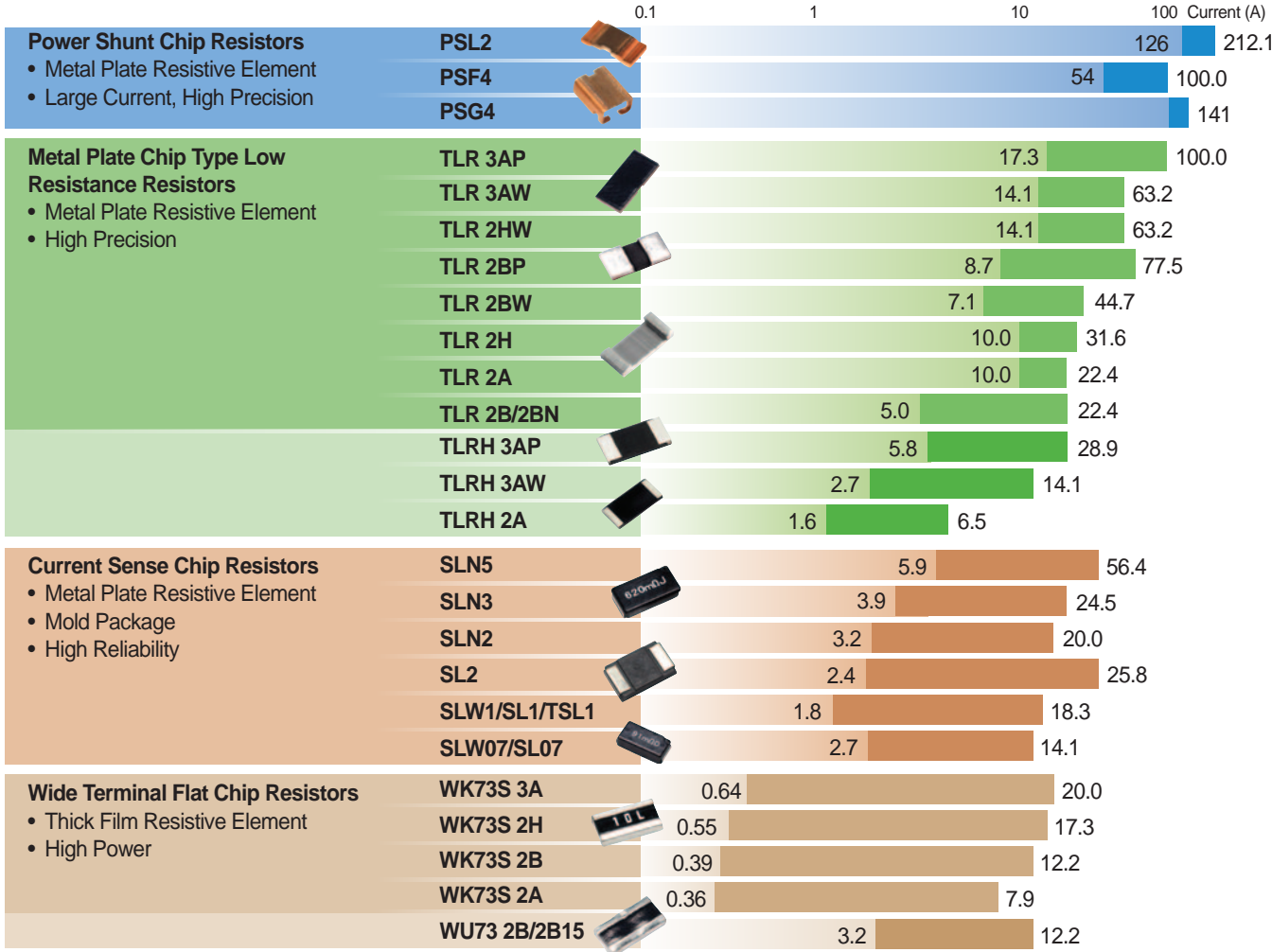
Current Sense Resistors Selection Guide

KOA offers complete family of Current Sense Resistors capable of sensing large to small currents with ultra-low resistance

Applications: Current management sensor including charge/discharge of secondary batteries • Current control sensor of motors and DC/DC converters • Circuit protecting sensor by overcurrent detection

Current Sense Resistors

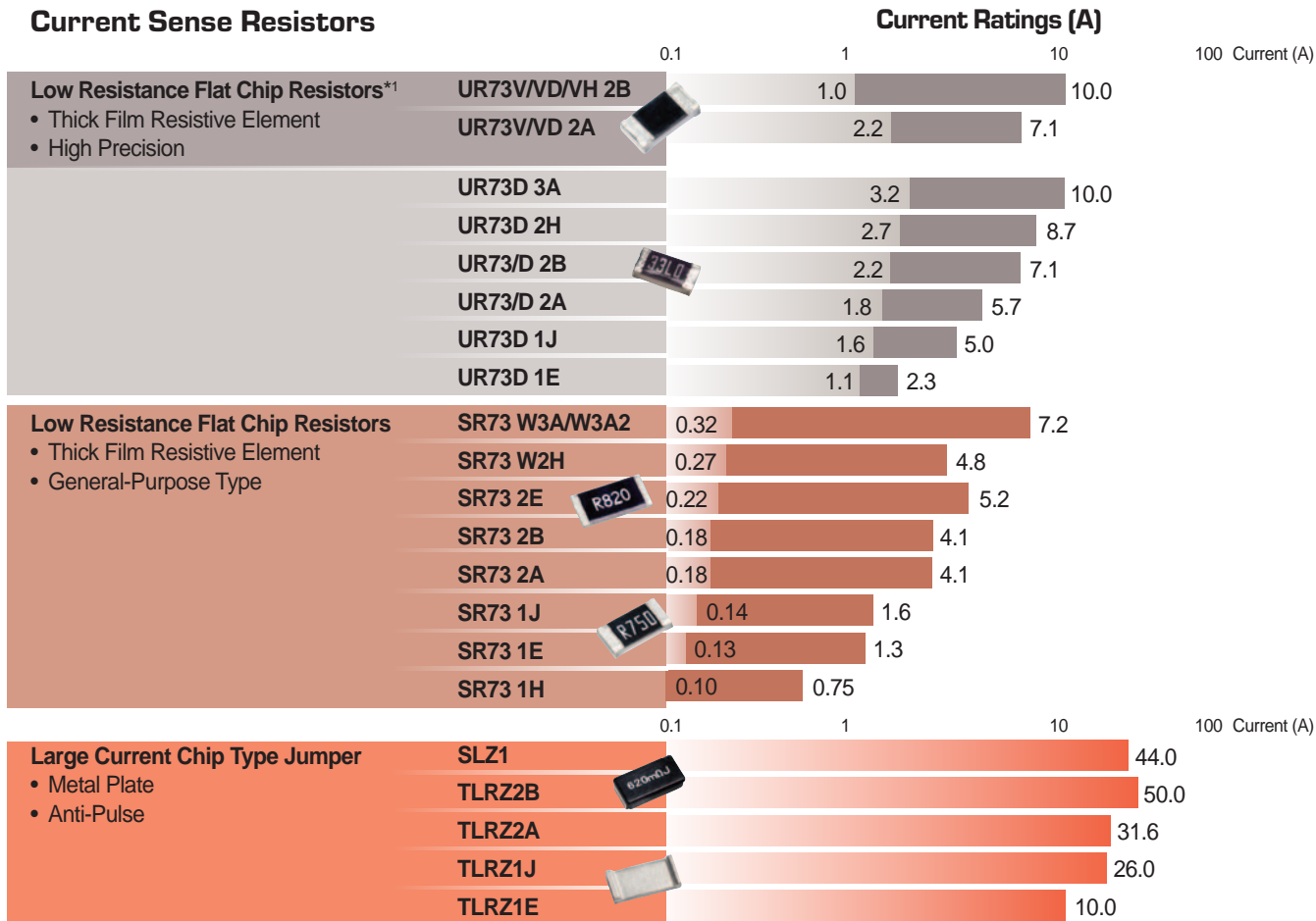
Current Ratings (A)



Specifications

Resistance Range	Rated Power	Size (Inch)	Tolerance
0.2m/0.3m/0.5m	8W/9W	2512	±1%
0.5m/1mΩ	5W/3W	1216	±1%
0.5mΩ	10W	2725	±1%
0.5m~10mΩ	3W~5W	2512	±1%
0.5m~10mΩ	2W	2512	±1%
0.5m~10mΩ	2W	2010	±1%
0.5m~20mΩ	1.5W~3W	1206	±1%
0.5m~20mΩ	1W	1206	±1%
1m~10mΩ	1W	2010	±1%
2m~10mΩ	1W	0805	±1%
1m~20mΩ	0.5W	1206	±1%
6m~120mΩ	4~5W	2512	±1%
10m~270mΩ	2W	2512	±1%
12m~100mΩ	0.25~0.5W	0805	±1%
2.2m~200mΩ	7W	4527	±0.5,1%
5m~200mΩ	3W	4527	±0.5,1,5%
5m~200mΩ	2W	4527	±0.5,1,5%
3m~360mΩ	2W	4527	±0.5,1,2,5%
3m~300mΩ	1.5W/1W/1W	2512	±0.5,1,2,5%
5m~100mΩ	1W/0.75W	2010	±1,5%
10m~9.76Ω	4W	1225	1,5%
10m~9.76Ω	3W	1020	±1,5%
10m~9.76Ω	1.5W	0612	±0.5,1,5%
20m~9.76Ω	1.25W	0508	±1,5%
10m~100mΩ	1W/1.5W	0612	±1%

Current Sense Resistors



Specifications			
Resistance Range	Rated Power	Size (Inch)	Tolerance
10m~1Ω	0.5~1W	1206	±1%
10m~100mΩ	0.5W	0805	±1%
10m~100mΩ	1W	2512	±1%
10m~100mΩ	0.75W	2010	±1%
10m~100mΩ	0.5W	1206	±1%
10m~100mΩ	0.33W	0805	±1%
10m~100mΩ	0.25W	0603	±1%
24m~100mΩ	0.125W	0402	±1%
39m~10Ω	1W/2W	2512	±1,2,5%
33m~10Ω	0.75W	2010	±1,2,5%
24m~10Ω	0.5~0.66W	1210	±1,2,5%
30m~10Ω	0.33~0.5W	1206	±0.5,1,2,5%
30m~10Ω	0.33~0.5W	0805	±0.5,1,2,5%
100m~10Ω	0.2~0.25W	0603	±1,2,5%
100m~10Ω	0.166W	0402	±1,2,5%
180m~10Ω	0.1W	0201	±1.5%
Resistance Range	Rated Current	Size (Inch)	
Max. 0.5mΩ	44A	2512	
Max. 0.2mΩ	50A	1206	
Max. 0.2mΩ	31.6A	0805	
Max. 0.2mΩ	26A	0603	
Max. 0.5mΩ	10A	0402	

- This selection guide plots the current value calculated from $\sqrt{\text{Power rating} \div \text{upper or lower limit of resistance}}$. Please build the design considering heat dissipation.
 - This is the guideline to select products by current value. Please confirm product specification for actual design and selecting products and use the products based on the precautions to use.
 - Please confirm our catalog or delivery specification for the details of each product.
- *1 UR73/UR73D is only applied for car accessories as automotive use. Please ask us for details.

Main Applications

1. Current management sensor including charge/discharge of secondary batteries
2. Current control sensor of motors and DC/DC converters
3. Circuit protecting sensor by overcurrent detection