

# Increased Power Ratings for WU73 and WK73 Wide Terminal Resistors (AEC-Q200 qualified)



As a result of rigorous temperature testing, development and evaluation, the power rating for several wide terminal chip resistor series has been increased.

KOA's wide terminations SMD resistors now allow the designer to use a higher power rating for chip sizes 0612, 1020 and 1225.

The 90° rotated design offers several advantages compared to standard resistor footprints, such as:

- Higher reliability in power applications
- Improved terminal strength
- Lower expansion stress
- Lower temperature rise
- PCB space saving



## ■ Features

- Higher power than conventional style types
- Excellent heat dissipation characteristics
- Superior temperature and power cycling performance
- AEC-Q200 qualified
- **WU73**: current sensing with improved T.C.R.
- **WK73S**: current sensing range from 10 mΩ ~ 9.76 Ω
- **WK73R**: regular r-range from 10 Ω ~ 1 MΩ
- **WK73-RT**: Anti-Sulphuration types with increased power ratings are also available. Please contact KOA.

## ■ Applications

- Automotive, including 'under the hood' applications such as ECUs
- Power supplies
- DC-DC converters
- Motor controls
- Industrial power controls
- Battery packs
- Consumer electronics

## ■ Ratings

**NEW**

Operating Temperature Range: -55 °C ~ +155 °C

Type	Size (inch)	Power Rating	Rated Terminal Part Temp.	T.C.R. (ppm/K)	Resistance Range (Ω)		
					D: ±0.5% (E24, E96)	F: ±1% (E24, E96)	J: ±5% (E24)
WU73 2B15	0612	1.5 W	+95 °C	±100	-	10 m – 12 m	-
				±75	-	13 m – 27 m	-
				±100	-	30 m – 100m	-
WK73S 2B15	0612	1.5 W	+95 °C	±800	-	-	10 m – 27 m
				±200	-	30 m – 422 m	30 m – 390 m
				±100	430 m – 9.76	430 m – 9.76	430 m – 9.1
WK73R 2B15				±100	10 – 9.76 k	10 – 9.76 k	10 – 9.1 k
WK73S 2H2	1020	2 W	+95 °C	±800	-	-	10 m – 24 m
				±200	-	27 m – 215 m	27 m – 200 m
				±100	-	220 m – 9.76	220 m – 9.1
				±100	-	10 – 430 k	10 – 430 k
WK73R 2H2				±200	-	432 k – 1 M	470 k – 1 M
WK73S 3A3	1225	3 W	+95 °C	±800	-	-	10 m – 20 m
				±300	-	22 m – 32.4 m	22 m – 30 m
				±200	-	33 m – 357 m	33 m – 330 m
				±100	-	360 m – 9.76	360 m – 9.1
				±100	-	10 – 330 k	10 – 330 k
WK73R 3A3				±200	-	332 k – 1 M	360 k – 1 M

In case of using the parts at max. power rating, make sure that the max. terminal part temp. is not exceeded and follow the derating curve for these resistors.

The temperature of the product will increase depending on external elements heating the PCB. If this is the case please check the resistor terminal temperature.

For more information, please contact:

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