High Power Version Only
Not Recommended for New Design
See standard version of WK73S for replacement

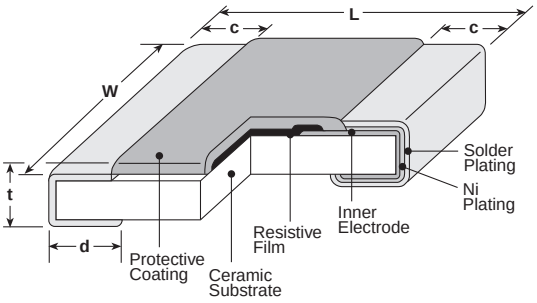
WK73S

higher power, wide terminal type flat chip resistors (low resistance)

features

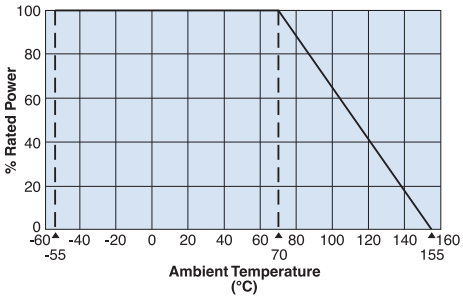
- Wide-side termination (reverse-geometry) type flat chip resistor
- High reliability and performance with T.C.R. ±100 x 10^{-6}/K, resistance tolerance ±1%
- Suitable for both reflow and flow solderings
- Products with lead-free terminations meet EU RoHS requirements. EU RoHS regulation is not intended for Pb-glass contained in electrode, resistor element and glass.
- AEC-Q200 Tested

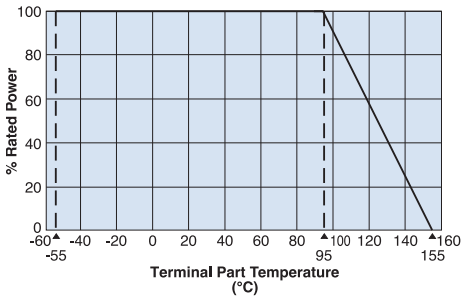
dimensions and construction



Type (Inch Size Code)	Dimensions inches (mm) L	W	c	d	t
2B15 (0612)	.063±.006 (1.6±0.15)	.126±.008 (3.2±0.2)	.012±.008 (0.3±0.2)	.018±.006 (0.45±0.15)	.024±.004 (0.6±0.1)
2H2 (1020)	.098±.006 (2.5±0.15)	.197±.006 (5.0±0.15)	.016±.008 (0.4±0.2)	.030±.006 (0.75±0.15)	
3A3 (1225)	.122±.006 (3.1±0.15)	.252±.006 (6.3±0.15)	.018±.008 (0.45±0.2)		

Derating Curve





For resistors operated at an ambient temperature of 70°C or above, a power rating shall be derated in accordance with the above derating curve.

When the terminal part temperature of the resistor exceeds the rated terminal part temperature shown above, the power shall be derated according to the derating curve.
Please refer to "Introduction of the derating curve based on the terminal part temperature" in the beginning of our catalog before use.

If you want to use at rated power (*1), use derating curves based on the terminal part temperature above.

ordering information

WK73S	2H2	T	TE	33L0	F
Type	**Size**	**Termination Material**	**Packaging**	**Nominal Resistance**	**Resistance Tolerance**
WK73S	2B15: 1.5W 2H2: 2W 3A3: 3W	T: Sn	TD: 0612: 7" 4mm pitch punched paper TE: 1020, 1225: 7" 4mm pitch embossed plastic For further information on packaging, please refer to Appendix A	±0.5%, ±1%: 3 significant figures + 1 multiplier "R" indicates decimal on value <100Ω ±5%: 2 significant figures + 1 multiplier "R" indicates decimal on values <10Ω All values less than 0.1Ω (100mΩ) are expressed in mΩ with "L" as decimal. Ex: 33mΩ, 1% = 33L0	D: ±0.5% F: ±1% J: ±5%

Contact us when you have control request for environmental hazardous material other than the substance specified by EU RoHS.

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applications and ratings

Part Designation	Power Rating	Rated Ambient Temp.	Rated Terminal Part Temp.	T.C.R. (X 10^{-6}/K)	Resistance Range (Ω) D±0.5% E-24/E-96	Resistance Range (Ω) F±1% E-24/E-96	Resistance Range (Ω) J±5% E-24	Operating Temp. Range
WK73S2B15 (0612)	1.5W[1]	70°C	95°C	±100	430m - 9.76	430m - 9.76	430m - 9.1	-55°C to +155°C
				±200	—	30m - 422m	30m - 390m	
				±800	—	—	10m - 27m	
WK73S2H2 (1020)	2.0W[1]	70°C	95°C	±100	—	220m - 9.76	220m - 9.1	
				±200	—	27m - 215m	27m - 200m	
				±800	—	—	10m - 24m	
WK73S3A3 (1225)	3.0W[1]	70°C	95°C	±100	—	360m - 9.76	360m - 9.1	
				±200	—	33m - 357m	33m - 330m	
				±300	—	22m - 32.4m	22m - 30m	
				±800	—	—	10m - 20m	

Rated voltage = $\sqrt{\text{Power rating x resistance value}}$

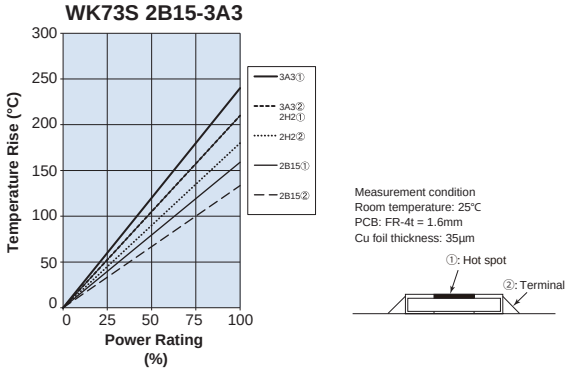
*[1] If you use at the rated power, please keep the condition that the terminal of the resistor is below the rated terminal part temperature. Please refer to the derating curves based on the terminal temperature of right side on the next page.

If any questions arise whether to use the"Rated Ambient Temperature"or the"Rated Terminal Part Temperature"in your usage conditions, please give priority to the"Rated Terminal Part Temperature".

For more details, please refer to"Introduction of the derating curves based on the terminal part temperature"on the beginning of our catalog.

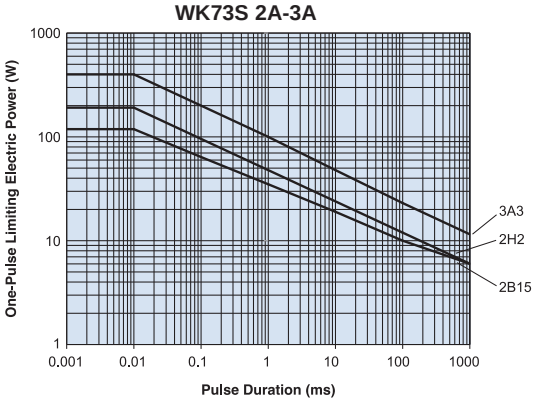
environmental applications

Temperature Rise



Regarding the temperature rise, the value of the temperature varies per conditions and board for use since the temperature is measured under our measuring conditions.

One-Pulse Limiting Electric Power



Please ask us about the resistance characteristic of continuous applied pulse.

The pulse endurance values are not assured values, so be sure to check the products on actual equipment when you use them.

Performance Characteristics

Parameter	Requirement Δ R ±(%+0.005Ω) Limit	Typical	Test Method
Resistance	Within specified tolerance	—	25°C
T.C.R.	Within specified T.C.R.	—	+25°C/-55°C and +25°C/+125°C
Overload (Short time)	±2%	±0.2%	Rated voltage x 2.0 for 5 seconds
Resistance to Solder Heat	±1%	±0.2%	260°C ± 5°C, 10 seconds ± 1 second
Bending Test	±1%	±0.1%	Holding point 90mm, Bending 1 time, Bending 5mm
Rapid Change of Temperature	±2%	±1%	-55°C (30 minutes) / +125°C (30 minutes), 1000 cycles
Moisture Resistance	±2%	±0.2%	40°C ± 2°C, 90%-95% RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
Endurance at 70°C	±2%	±0.2%	70°C ± 2°C or rated terminal part temperature ±2°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
High Temperature Exposure	±2%: J (±5%) ±1%: all others	±0.5%: J (±5%) ±0.2%: all others	+155°C, 1000 hours

Additional environmental applications can also be found at www.koaspeer.com