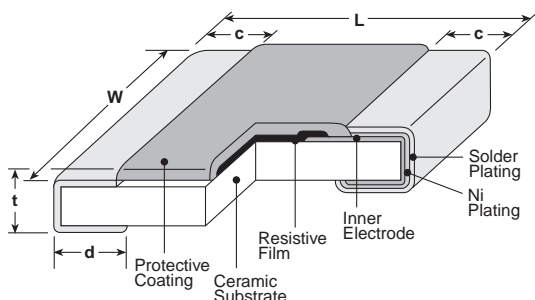




features

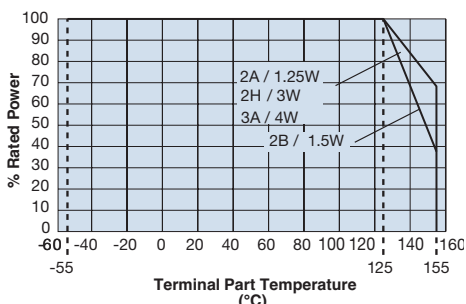
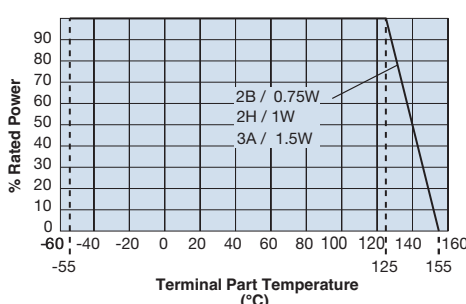
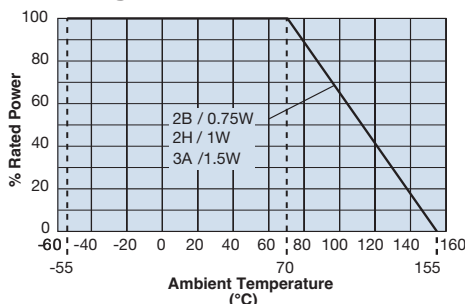
- Wide-side termination (reverse-geometry) type flat chip resistor
- High reliability and performance with T.C.R. $\pm 100 \times 10^{-6}/K$, resistance tolerance $\pm 0.5\%$
- Suitable for both reflow and flow solderings
- Products with lead-free terminations meet EU RoHS requirements. EU RoHS regulation is not intended for Pb-glass contained in electrode, resistor element and glass.
- AEC-Q200 Tested

dimensions and construction



Type (Inch Size Code)	Resistance Range (Ω)	Dimensions inches (mm)				
		L ± 0.15	W	c	d	t ± 0.1
2A (0508)	20m-61.9m	.049 \pm .006 (1.25 \pm 0.15)	.079 \pm .006 (2.0 \pm 0.15)	.016 \pm .006 (0.4 \pm 0.15)	.014 \pm .008 (0.35 \pm 0.2)	.022 \pm .004 (0.55 \pm 0.1)
	62m-9.76m			.012 \pm .008 (0.3 \pm 0.2)		
2B (0612)	10m-9.76m	.063 \pm .006 (1.6 \pm 0.15)	.126 \pm .008 (3.2 \pm 0.2)	.012 \pm .008 (0.3 \pm 0.2)	.018 \pm .006 (0.45 \pm 0.15)	.024 \pm .004 (0.6 \pm 0.1)
2H (1020)	10m-9.76m	.098 \pm .006 (2.5 \pm 0.15)	.197 \pm .006 (5.0 \pm 0.15)	.016 \pm .008 (0.4 \pm 0.2)	.030 \pm .006 (0.75 \pm 0.15)	
3A (1225)	10m-9.76m	.122 \pm .006 (3.1 \pm 0.15)	.252 \pm .006 (6.3 \pm 0.15)	.018 \pm .008 (0.45 \pm 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 curves based on the terminal part temperature" in the beginning of the catalog before use.

ordering information

WK73S	2A	T	TE	33L0	F
Type	Size	Termination Material	Packaging	Nominal Resistance	Resistance Tolerance
WK73S	2A: 1.25W ¹ 2B: 0.75W, 1.5W ¹ 2H: 1W, 3W ¹ 3A: 1.5W, 4W ¹	T: Sn	TD: 0508, 0612: 7" 4mm pitch punched paper TE: 1020, 1225: 7" embossed plastic For further information on packaging, please refer to Appendix A	$\pm 1\%$: 3 significant figures + 1 multiplier "R" indicates decimal on value <100 Ω $\pm 5\%$: 2 significant figures + 1 multiplier "R" indicates decimal on values <10 Ω All values less than 0.1 Ω (100m Ω) are expressed in m Ω with "L" as decimal. Ex: 33m Ω , 1% = 33L0	D: $\pm 0.5\%$ F: $\pm 1\%$ J: $\pm 5\%$

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.

applications and ratings

current sense

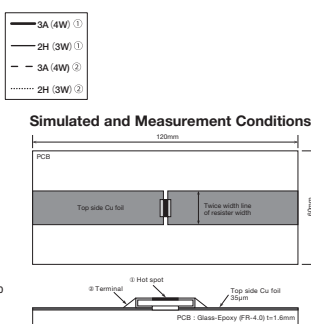
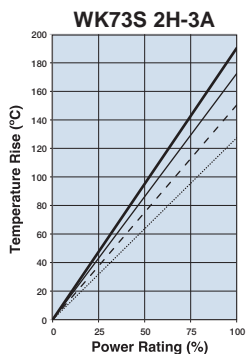
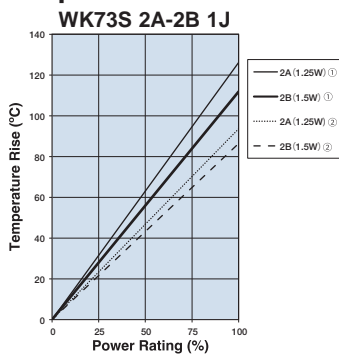
Part Designation	Power Rating	Rated Ambient Temp.	Rated Terminal Part Temp.	T.C.R. (X 10 ⁻⁶ /K)	Resistance Range (Ω)			Operating Temp. Range
					D±0.5% E-24/E-96	F±1% E-24/E-96	J±5% E-24	
WK73S2A (0508)	1.25W ¹	—	125°C	±100	—	1 - 9.76	1 - 9.1	-55°C to +155°C
				0~+200	—	30m - 976m	30m - 910m	
				0~+300	—	20m - 29.4m	20m - 27m	
WK73S2B (0612)	0.75W	70°C	125°C	±100	430m - 9.76	430m - 9.76	430m - 9.1	
				±200	—	30m - 422m	30m - 390m	
				±800	—	—	10m - 27m	
	1.5W ¹	—	125°C	±100	430m - 9.76	430m - 9.76	430m - 9.1	
				±200	—	30m - 422m	30m - 390m	
				±800	—	—	10m - 27m	
WK73S2H (1020)	1.0W	70°C	125°C	±100	—	220m - 9.76	220m - 9.1	
				±200	—	27m - 215m	27m - 200m	
				±800	—	—	10m - 24m	
	3W ¹	—	125°C	±100	—	220m - 9.76	220m - 9.1	
				±200	—	27m - 21.5m	27m - 220m	
				±800	—	—	10m - 24m	
WK73S3A (1225)	1.5W	70°C	125°C	±100	—	—	360m - 9.1	
				±200	—	360m - 9.76	33m - 330m	
				±300	—	33m - 357m	22m - 30m	
	4.0W ¹	—	125°C	±100	—	360m - 9.76	360m - 9.1	
				±200	—	33m - 357m	33m - 330m	
				±300	—	22m - 32.4m	22m - 30m	

Rated voltage = √Power rating x resistance value

¹ If you want to use at rated power use derating curves based on the terminal part temperature on the right side graph located on previous page.

If any questions arise whether to use the "Rated Ambient Temperature" or the "Rated Terminal Part Temperature", please give priority to the "Rated Terminal Part Temperature." For more details refer to the "Introduction of the derating curves based on the terminal part temperature" in the beginning of the catalog.

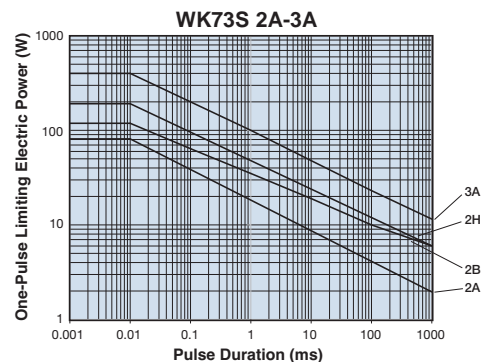
Temperature Rise



Temperature rise is simulated and measured under our conditions. So, the values will vary depending on the operating conditions and PCB used.

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.

environmental applications Performance Characteristics

Parameter	Requirement Δ R ±(+0.005Ω) Limit		Test Method							
	Typical	Typical								
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%	Overload wattage for 5s							
			<table border="1"> <tr> <th>Type</th> <th>2A</th> <th>2B</th> <th>2H</th> <th>3A</th> </tr> <tr> <td>Overload Wattage</td> <td>4W</td> <td>6W</td> <td>8W</td> <td>12W</td> </tr> </table>	Type	2A	2B	2H	3A	Overload Wattage	4W
Type	2A	2B	2H	3A						
Overload Wattage	4W	6W	8W	12W						
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 (±0.5%) ±0.2%: all others	+155°C, 1000 hours							

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

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.

3/18/25