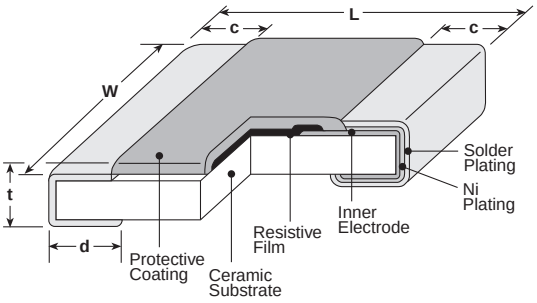
features

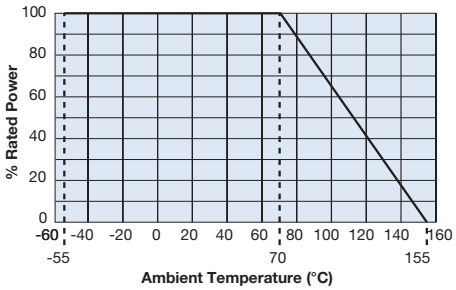
- Wide-side termination (reverse-geometry) type flat chip resistor
- High reliability and performance with T.C.R. ±100 x 10^{-6}/K, resistance tolerance ±0.5%
- Suitable for both reflow and flow solderings
- Products with lead-free terminations meet EU RoHS requirements. EU RoHS regulation is not intended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

dimensions and construction

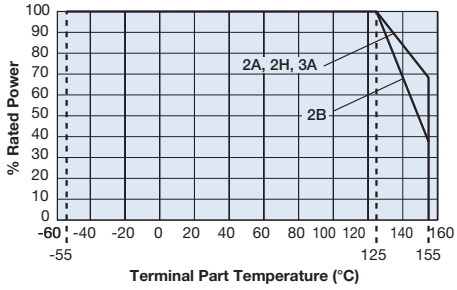


Type (Inch Size Code)	Resistance Range (Ω)	Dimensions inches (mm) L±0.15	W	c	d	t±0.1
2A (0508)	20m~61.9m	.049±.006 (1.25±0.15)	.079±.006 (2.0±0.15)	.016±.006 (0.4±0.15)	.014±.008 (0.35±0.2)	.022±.004 (0.55±0.1)
	62m~9.76			.012±.008 (0.3±0.2)		
2B (0612)	10m~9.76	.063±.006 (1.6±0.15)	.126±.008 (3.2±0.2)	.012±.008 (0.3±0.2)	.018±.006 (0.45±0.15)	.024±.004 (0.6±0.1)
2H (1020)	10m~9.76	.098±.006 (2.5±0.15)	.197±.006 (5.0±0.15)	.016±.008 (0.4±0.2)	.030±.006 (0.75±0.15)	
3A (1225)	10m~9.76	.122±.006 (3.1±0.15)	.248±.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, the power rating shall be derated in accordance with the above derating curve.



For resistors operated at a terminal part temperature of 125°C or above, the power rating shall be derated in accordance with the derating curve.

For more details on derating click here, "*Derating Curves – Caution & Terms*."

ordering information

WK73S	2A	T	TE	33L0	F
Type	**Size[1]**	**Termination Material**	**Packaging**	**Nominal Resistance**	**Resistance Tolerance**
WK73S	2A: 1.25W 2B: 1.5W 2H: 3W 3A: 4W	T: Sn	TD: 0508, 0612: 4mm pitch punched paper TE: 1020, 1225: 4mm embossed plastic For further information on packaging, please refer to Appendix A	±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%

08/17/26

applications and ratings

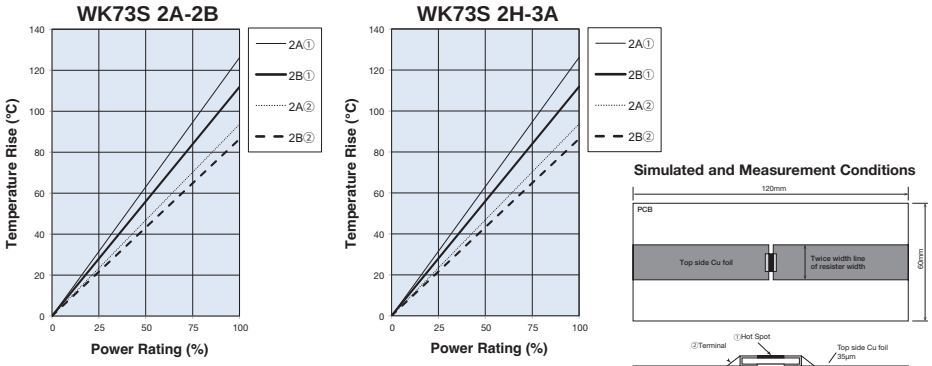
Part Designation	Power Rating[1]	Rated Ambient Temp.	Rated Terminal Part Temp.	T.C.R. (X 10⁻⁶/K)	Resistance Range (Ω) D±0.5% E-24/E-96	F±1% E-24/E-96	J±5% E-24	Operating Temp. Range
WK73S2A (0508)	1.25W	70°C	125°C	±100	—	1 - 9.76	1 - 9.1	-55°C to +155°C
				0~+200	—	30m - 976m	30m - 910m	
				0~+300	—	20m - 29.4m	20m - 27m	
WK73S2B (0612)	1.5W	70°C	125°C	±100	430m - 9.76	430m - 9.76	430m - 9.1	
				±200	—	30m - 422m	30m - 390m	
				±800	—	—	10m - 27m	
WK73S2H (1020)	3W	70°C	125°C	±100	—	220m - 9.76	220m - 9.1	
				±200	—	27m - 215m	27m - 200m	
				±800	—	—	10m - 24m	
WK73S3A (1225)	4W	70°C	125°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 the terminal part temperature exceeds the rated terminal part temperature, even if it is below the rated ambient temperature, apply the derating curve for the terminal part temperature.

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 on derating click here, "*Derating Curves – Caution & Terms*."

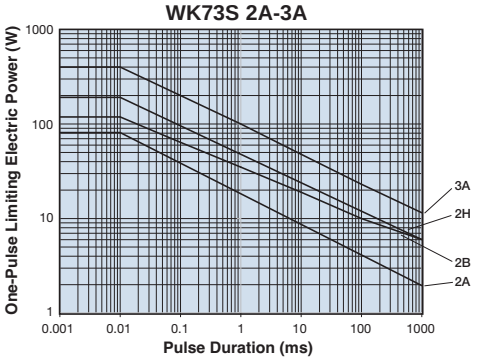
Temperature Rise



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.

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

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 the actual equipment used.

environmental applications

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%	Overload wattage for 5s 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 or Rated Terminal Part Temperature	±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