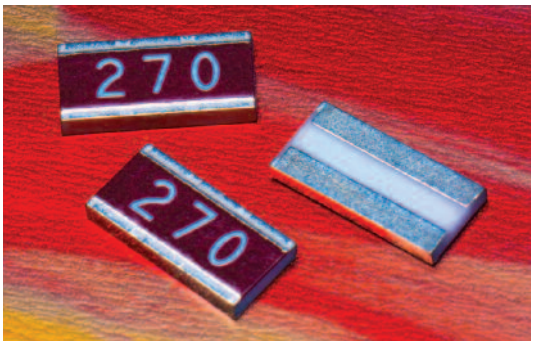
KOA SPEER ELECTRONICS, INC.

WG73

wide terminal type pulse power flat chip resistors (anti surge)

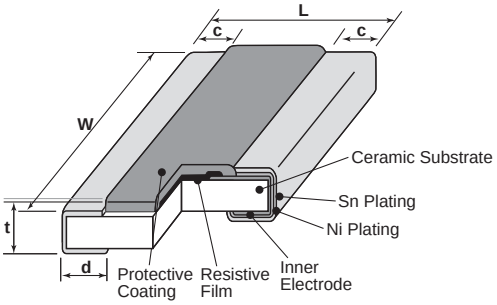
EU RoHS COMPLIANT



features

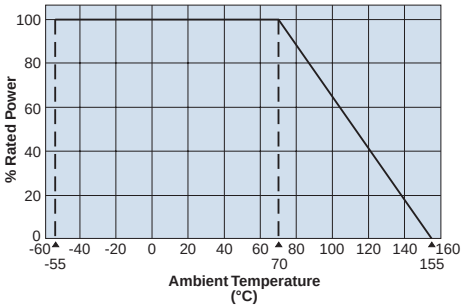
- Superior to WK73 series in pulse withstanding voltage
- Suitable for both flow and reflow solderings
- Products meet EU RoHS requirements
- AEC-Q200 Tested

dimensions and construction

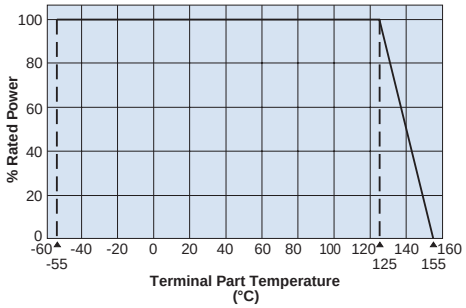


Type (Inch Size Code)	Dimensions inches (mm) L	W	c	d	t
2B (0612)	.063± +.004 -.008 (1.6± +0.1 -0.2)	.126± +.004 -.012 (3.2± +0.1 -0.3)	.012±.008 (0.3±0.2)	.018±.006 (0.45±0.15)	.024±.004 (0.6±0.1)
2H (1020)	.098±.006 (2.5±0.15)	.197±.006 (5.0±0.15)	.016±.008 (0.4±0.2)	.030±.006 (0.75±0.15)	.024±.004 (0.6±0.1)
3A (1225)	.122± +.008 -.004 (3.1± +0.2 -0.1)	.248±.006 (6.3±0.15)	.018±.008 (0.45±0.2)	.030±.006 (0.75±0.15)	.024±.004 (0.6±0.1)

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.



For resistors operated terminal temperature of described for each size or above, a power rating shall be derated in accordance with 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.

ordering information

WG73	2H	T	TE	101	K
Type	Power Rating	Termination Surface Material	Packaging	Nominal Resistance	Resistance Tolerance
	2B: 1W 2H: 1.5W 3A: 2W	T : Sn	TD: 4mm pitch punch paper TE: 4mm pitch embossed plastic For further information on packaging, please refer to Appendix A	3 digits	K: ±10% M:±20%

11/30/22

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applications and ratings

Part Designation	Power Rating	Rated Ambient Temperature	Rated Terminal Part Temperature	T.C.R. (X 10^{-6}/K)	Resistance Range (Ω) K±10% E-12	Resistance Range (Ω) M±20% E-12	Maximum Working Voltage	Maximum Overload Voltage	Operating Temperature Range
WG732B	1.0W	70°C	±125°C	±100	560m ~ 1k	560m ~ 1k	200V	400V	-55°C to +155°C
WG732H	1.5W	70°C	±125°C	±100	560m ~ 1k	560m ~ 1k	200V	400V	-55°C to +155°C
WG733A	2.0W	70°C	±125°C	±100	560m ~ 1k	560m ~ 1k	200V	400V	-55°C to +155°C

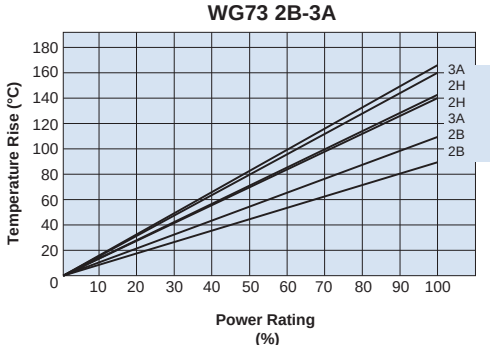
Rated voltage = $\sqrt{\text{Power rating x resistance value}}$ or max. working voltage, whichever is lower

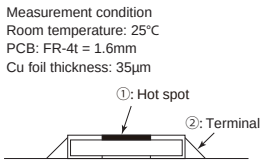
If any questions arise whether to use the “Rated Ambient Temperature” or the “Rated Terminal Part Temperature” in your usage conditions, please give priority to the “Rated Terminal Part Temperature.”

Prior to use and for more details, please refer to the “Introduction of the derating curves based on the terminal part temperature” in the beginning of our catalog.

environmental applications

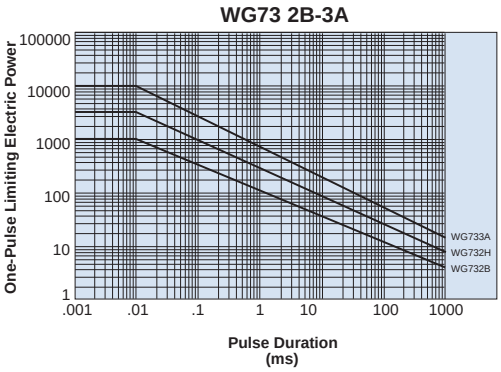
Temperature Rise





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



Performance Characteristics

Parameter	Requirement Δ R ±(%+0.005Ω) Limit	Requirement Δ R ±(%+0.005Ω) 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 (DC) x 2.5 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, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
High Temperature Exposure	±1%	±0.2%	+155°C, 1000 hours