KOA SPEER ELECTRONICS, INC.

WK73-RT

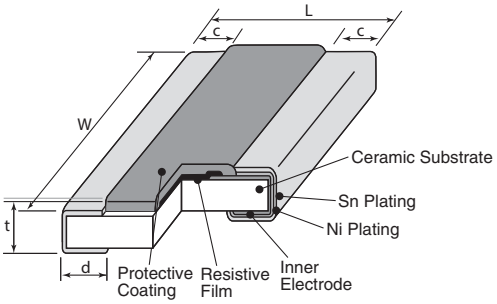
higher power, wide terminal type flat chip resistors (anti sulfuration)

EU RoHS COMPLIANT

features

- Anti-sulfuration type, wide-side termination (reverse-geometry) type flat chip resistor
- Excellent anti-sulfuration characteristic due to using high sulfuration-proof inner top electrode material
- Suitable for both flow and reflow solderings
- Products meet EU RoHS requirements. EU RoHS regulation is not intended for Pb-glass contained in electrode, resistor element and glass.
- AEC-Q200 Qualified

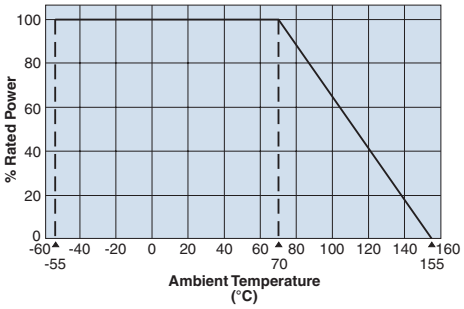
dimensions and construction



Type (Inch Size Code)	Dimensions inches (mm) L	W	c	d	t
2B15 (0612)	.063± $^{+.004}_{-.008}$ ($1.6\pm^{+0.1}_{-0.2}$)	.126± $^{+.004}_{-.012}$ ($3.2\pm^{+0.1}_{-0.3}$)	.012±.008 (0.3±0.2)	.018±.006 (0.45±0.15)	.024±.004 (0.6±0.1)
2H2 (1020)	.098± $^{+.004}_{-.008}$ ($2.5\pm^{+0.1}_{-0.2}$)	.197± $^{+.004}_{-.008}$ ($5.0\pm^{+0.1}_{-0.2}$)	.016±.008 (0.4±0.2)	.030±.006 (0.75±0.15)	.024±.004 (0.6±0.1)
3A3 (1225)	.122± $^{+.008}_{-.004}$ ($3.1\pm^{+0.2}_{-0.1}$)	.248±.006 (6.3±0.15)	.018±.008 (0.45±0.2)	.030±.006 (0.75±0.15)	.024±.004 (0.6±0.1)

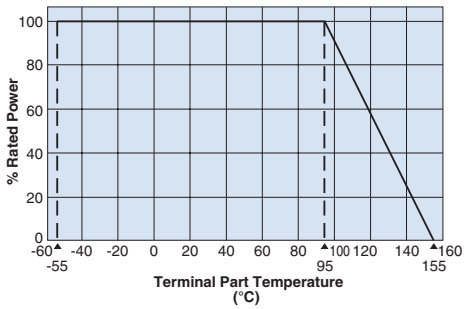
Derating Curve

Ambient Temperature



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.

Terminal Part Temperature



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

WK73R	2B15	RT	TD	10R0	F
Type	**Size**	**Termination Material**	**Packaging**	**Nominal Resistance**	**Resistance Tolerance**
WK73S WK73R	2B15: 1.5W 2H2: 2W 3A3: 3W	RT: Sn Anti-Sulfur	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	±1%: 3 significant figures + 1 multiplier "R" indicates decimal on value <100Ω ±5%: 2 significant figures + 1 multiplier "R" indicates decimal on values <10Ω	F: ±1% J: ±5%

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applications and ratings

Part Designation	Power Rating	Rated Terminal Part Temperature	T.C.R. (X 10^{-6}/K)	Resistance Range (Ω) F±1% E-24 • E-96	Resistance Range (Ω) J±5% E-24	Maximum Working Voltage	Maximum Overload Voltage	Operating Temperature Range
WK73S2B15	1.5W	95°C	±100	1 ~ 9.76	1 ~ 9.1	200V	400V	-55°C to +155°C
			±150	0.3 ~ 0.976	0.3 ~ 0.91			
WK73R2B15	1.5W	95°C	±100	10 ~ 9.76k	10 ~ 9.1k			
WK73S2H2RT	2.0W	95°C	±100	1 ~ 9.76	1 ~ 9.1	200V	400V	
			±150	0.2 ~ 0.976	0.2 ~ 0.91			
WK73R2H2RT	2.0W	95°C	±100	10 ~ 430k	10 ~ 430k			
			±200	432k - 1M	470k - 1M			
WK73S3A3RT	3.0W	95°C	±100	1 ~ 9.76	1 ~ 9.1	200V	400V	
WK73R3A3RT	3.0W	95°C	±100	10 ~ 330k	10 ~ 330k			
			±200	332k - 1M	360k - 1M			

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

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%	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	±0.5%	±0.3%	-55°C (30 minutes), +125°C (30 minutes), 100 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
Sulfuration Test	±5%	±0.2%	Soaked in industrial oil with 3.5% sulfur concentration 105°C ± 3°C, 500 hours

Please refer to conventional products for characteristic data such as temperature rise.

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

12/10/20