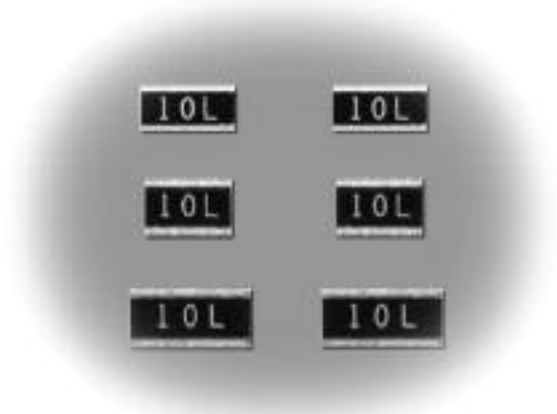
KOA SPEER ELECTRONICS, INC.

WK73

high power, wide terminal type flat chip resistors

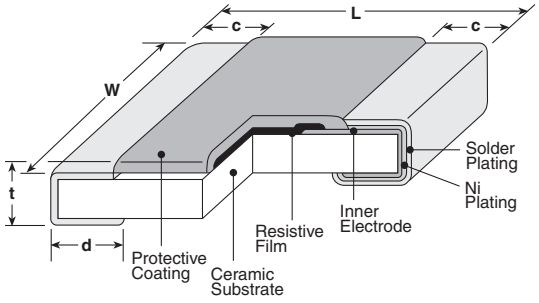
EU RoHS COMPLIANT



features

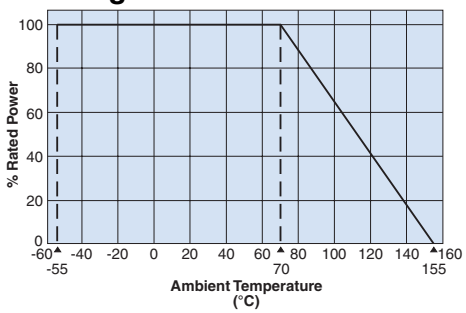
- Wide-side termination (reverse-geometry) type flat chip resistor
- High reliability and performance with T.C.R. ±100 x 10^{-6}/K, resistance tolerance ±1%
- Marking: Black protective coat
- Products with lead-free terminations meet EU RoHS requirements. EU RoHS regulation is not intended for Pb-glass contained in electrode, resistor element and glass.
- AEC-Q200 Qualified: 0612(2B), 1020(2H), 1218(2J), 1225(3A)

dimensions and construction

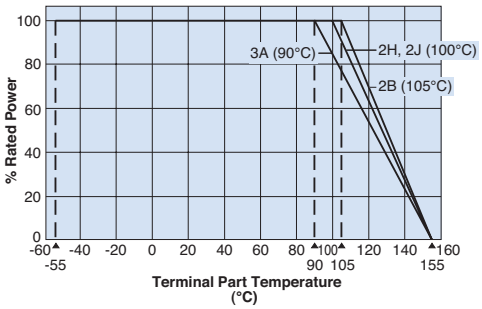


Type (Inch Size Code)	Dimensions inches (mm) L	W	c	d	t
2B (0612)	.063±.006 (1.6±0.15)	.126±.006 (3.2±0.2)	.012±.008 (0.3±0.2)	.018±.006 (0.45±0.15)	.024±.004 (0.6±0.1)
2H (1020)	.098±.006 (2.5±0.15)	.197±.006 (5.0±0.15)	.016±.008 (0.4±0.2)	.030±.006 (0.75±0.15)	
2J (1218)	.122±.006 (3.1±0.15)	.181±.006 (4.6±0.15)	.016±.008 (0.4±0.2)		
3A (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.



For resistors operated terminal temperature of described for each size or above, a power rating shall be derated in accordance with the derating curve above.
Please refer to "Introduction of the derating curve based on the terminal part temperature" on the beginning of our catalog before use.

ordering information

New Part #

WK73S	2J	T	TE	33L0	F
Type	**Size**	**Termination Material**	**Packaging**	**Nominal Resistance**	**Resistance Tolerance**
WK73S WK73R	2B: 0.75W 2H: 1W 2J: 1W 3A: 1.5W	T: Sn	TD: 0612: 7" 4mm pitch punched paper TE: 1020, 1218, 1225: 7" embossed plastic TED: 1020, 1218, 1225: 10" 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%

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

11/27/14

applications and ratings

Part Designation	Power Rating	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	Maximum Working Voltage	Maximum Overload Voltage	Rated Terminal Part Temp.	Operating Temp. Range
WK73S2B	0.75W (1.0W*)	±800	—	—	10m - 27m	200V	400V	105°C	-55°C to +155°C
		±200	—	30m - 422m	30m - 390m				
		±100	—	430m - 9.76	430m - 9.1				
WK73R2B	0.75W	±100	10 - 1M	10 - 1M	10 - 1M				
WK73S2H	1.0W	±800	—	—	10m - 24m	200V	400V	100°C	
		±200	—	27m - 215m	27m - 200m				
		±100	—	220m - 9.76	220m - 9.1				
WK73R2H	1.0W	±100	—	10 - 430k	10 - 430k				
		±200	—	432k - 1M	470k - 1M				
WK73S2J	1.0W	±800	—	—	10m - 30m	200V	400V		
		±200	—	33m - 237m	33m - 220m				
		±100	—	240m - 9.76	240m - 9.1				
WK73R2J	1.0W	±100	—	10 - 510k	10 - 510k				
		±200	—	511k - 1M	560k - 1M				
WK73S3A	1.5W (2.0W*)	±800	—	—	10m - 20m	200V	400V	90°C	
		±300	—	22m - 32.4m	22m - 30m				
		±200	—	33m - 357m	33m - 330m				
		±100	—	360m - 9.76	360m - 9.1				
WK73R3A	1.5W (2.0W*)	±100	—	10 - 330k	10 - 330k				
		±200	—	332k - 1M	360k - 1M				

Rated ambient temperature: +70°C

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

* Please refer to the "Higher Power Ratings" statement in the beginning of the catalog. Contact KOA prior to usage.

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 2.5 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	±0.5%	±0.1%	-55°C (30 minutes), +155°C (30 minutes), 5 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	±2%: WK73S (±5%) ±1%: all others	±0.5%: WK73S (±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.

12/05/14

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

KOA Speer:

WK73S2JTTER560F WK73S2JTTER390F WK73R2JTTE132J WK73S3ATTER150F WK73R2HTTE1000F
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