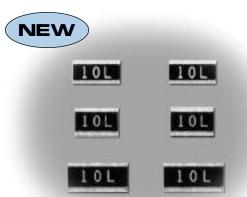




higher power, wide terminal type flat chip resistors

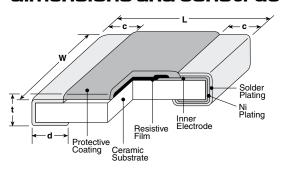


features



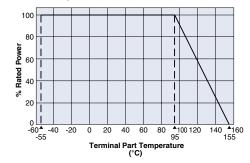
- Wide-side termination (reverse-geometry) type flat chip resistor
- High reliability and performance with T.C.R. ±100 x 10⁻⁶/K, resistance tolerance ±1%
- Marking: Black protective coat
- Products with lead-free terminations meet EU RoHS requirements. EU RoHS regulation is not intended for Pb-glass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

dimensions and construction



Туре	Dimensions inches (mm)				
(Inch Size Code)	L	W	С	d	t
2H2 (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)
3A3 (1225)	.122±.006 (3.1±0.15)	.252±.006 (6.3±0.15)	.018±.008 (0.45±0.2)		

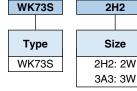
Derating Curve



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" in the beginning of our catalog before use. If you want to use at rated power (*1), use derating curves based on the terminal part temperature on the right side graph.

ordering information









TD. 7 4mm pitch				
punched paper				
TE: 7" 4mm pitch				
embossed plastic				
For further information on				
packaging, please refer				
to Appendix A				

33L0 Nominal Resistance

 $\pm 1\%$: 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 0.1Ω ($100m\Omega$) are expressed in $m\Omega$ with "L" as decimal. Ex: $33m\Omega$, 1% = 33L0

Resistance Tolerance 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.





higher power, wide terminal type flat chip resistors

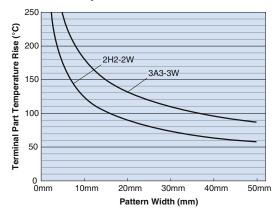
applications and ratings

Part	Power	Rated Terminal Part Temp.	T.C.R. Resistance Range (Ω)			Maximum	Maximum	Operating
Designation	Rating		(X 10 ⁻⁶ /K)	F±1% E-24/E-96	J±5% E-24	Working Voltage	Overload Voltage	Temp. Range
WK73S2H2 2.0W ¹		±100	220m - 9.76	220m - 9.1				
	2.0W1	95°C	±200	27m - 215m	27m - 200m	200V	400V	-55°C
			±800	_	10m - 24m			
WK73S3A3 3.0W ¹		±100	360m - 9.76	360m - 9.1			to	
	2 0\\/1	95°C	±200	33m - 357m	33m - 330m	200V	400V	+155°C
	3.000		±300	22m - 32.4m	22m - 30m			
			±800	_	10m - 20m			

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

environmental applications

Device Temperature Data



Room Temperature 25°C PCB: FR-4 t=1.6mm Cu foil thickness=35 μ m

While using under high power, the temperature of the product may increase depending on the condition of heat dissipation from PCB.

Be sure to check the terminal part temperature as well as precautions for use on delivery specifications before use.

Performance Characteristics

	Requirement Δ R ±(%+0.005 Ω)		
Parameter	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), +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%: J (±5%) ±1%: all others	±0.5%: J (±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.

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