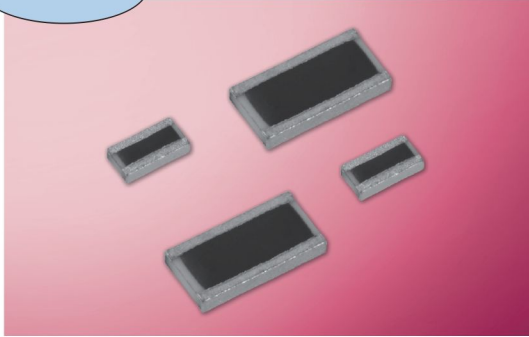


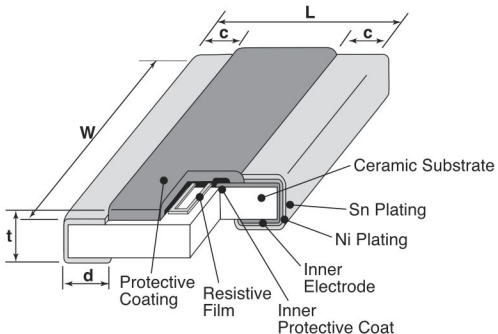
NEW


features

- SMD metal film resistors of wide terminal type
- High precision type $\pm 0.1\%$ is also available as standard
- High performance T.C.R. ± 10 ppm/ $^{\circ}\text{C}$ is also available as standard
- Low current noise
- Operating temperature range $\sim 155^{\circ}\text{C}$
Rated ambient temperature: 85°C
- High reliability with ΔR of $\pm 0.1\%$ in the long-term reliability test
- Endurance at 85°C (1,000h): ΔR of $\pm 0.1\%$
- Improved moisture resistance by special protective coating
- High precision resistor solution for tough environments, especially in high reliable automotive, medical and industrial applications
- Suitable for both flow and reflow solderings
- Products meet EU RoHS requirements
- AEC-Q200 Tested
- Sulfur resistance verified according to ASTM B 809-95

 EU
RoHS
 COMPLIANT

dimensions and construction



Type (Inch Size Code)	Dimensions inches (mm)				
	L	W	c	d	t
1J (0306)	.031 \pm .004 (0.8 \pm 0.1)	.063 \pm .008 (1.6 \pm 0.2)	.008 \pm .004 (0.2 \pm 0.1)	.008 \pm .004 (0.2 \pm 0.1)	.014 \pm .004 (0.35 \pm 0.1)
2B (0612)	.063 \pm .008 (1.6 \pm 0.2)	.122 \pm .008 (3.1 \pm 0.2)	.010 \pm .004 (0.25 \pm 0.1)	.012 \pm .006 (0.3 \pm 0.15)	.018 \pm .004 (0.45 \pm 0.1)

ordering information

WN73H	2B	T	TD	1002	B	25
Type	Power Rating 1J: 0.3W 2B: 1W	Termination Surface Material T : Sn	Packaging TD: 4mm pitch paper For further information on packaging, please refer to Appendix A	Nominal Resistance 4 digits	Resistance Tolerance B: $\pm 0.1\%$ C: $\pm 0.25\%$ D: $\pm 0.5\%$	T.C.R. (X $10^{-6}/\text{K}$) 10 25 50

applications and ratings

Part Designation	Power Rating	Rated Ambient Temperature	Rated Terminal Part Temperature	T.C.R. (X 10 ⁻⁶ /K)	Resistance Range (Ω) E24 · E96			Maximum Working Voltage	Maximum Overload Voltage	Operating Temperature Range	
					B: ±0.1%	C: ±0.25%	D: ±0.5%				
1J	0.3W	85°C	±125°C	±10	100 ~ 43k	100 ~ 43k	100 ~ 43k	75V	150V	-55°C to +155°C	
					±25	15 ~ 100k	15 ~ 100k				10 ~ 100k
					±50	15 ~ 100k	15 ~ 100k				10 ~ 100k
2B	1W	85°C	±125°C	±10	100 ~ 100k	100 ~ 100k	100 ~ 100k	100V	200V	-55°C to +155°C	
					±25	15 ~ 100k	15 ~ 100k				15 ~ 100k
					±50	15 ~ 100k	15 ~ 100k				15 ~ 100k

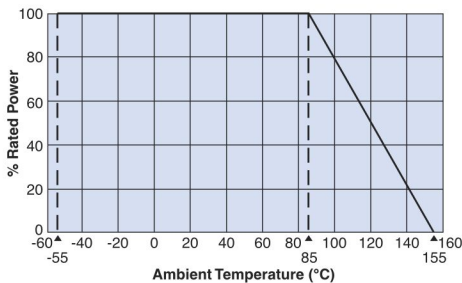
Rated voltage = $\sqrt{\text{Power rating} \times \text{resistance value}}$ or max. working voltage, whichever is lower

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."

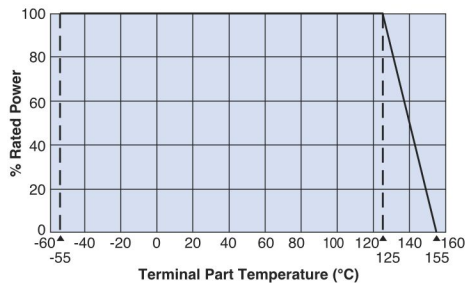
Prior to use and for more details, please refer to the "Introduction of the derating curves based on the terminal part temperature" in the beginning of our catalog.

environmental applications

Derating Curve



For resistors operated at an ambient temperature of 85°C or above, a power rating shall be derated in accordance with the above derating curve.



When the terminal part temperature of the resistor exceeds the rated terminal part temperature shown above, the power shall be derated according to the derating curve.

Please refer to "Introduction of the derating curves based on the terminal part temperature" on the beginning of our catalog before use.

Performance Characteristics

Parameter	Requirement ΔR ±(%+0.05Ω)		Test Method
	Limit	Typical	
Resistance	Within specified tolerance	—	25°C
T.C.R.	Within specified T.C.R.	—	+25°C/-55°C and +25°C/+155°C
Overload (Short time)	±0.1%	±0.03%	Rated voltage x 2.0 or Max. overload., whichever is less, for 5 seconds
Resistance to Solder Heat	±0.1%	±0.03%	260°C ± 5°C, 10 seconds ± 1 second
Rapid Change of Temperature	±0.1%*	±0.03%	-55°C (30 minutes), +155°C (30 minutes), 1000 cycles
Moisture Resistance	±0.1%*	±0.04%	85°C ± 2°C, 85%±5% RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
"Endurance at 85°C or rated terminal part temperature"	±0.1%*	±0.04%	85°C ± 2°C or rated terminal part temperature ±2°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
High Temperature Exposure	±0.1%*%*	±0.04%	+155°C, 1000 hours

* Depends on resistance value