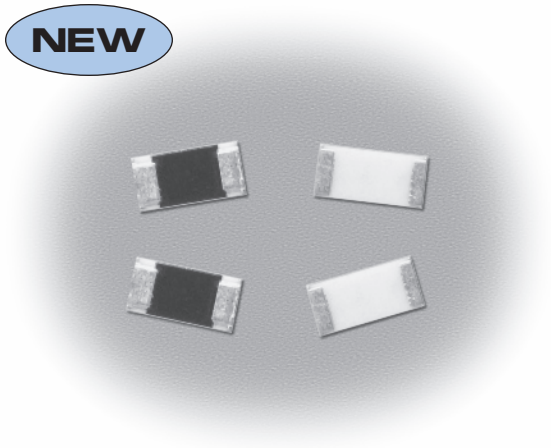
KOA SPEER ELECTRONICS, INC.

UR73V

low resistance flat chip resistor

EU RoHS COMPLIANT

NEW

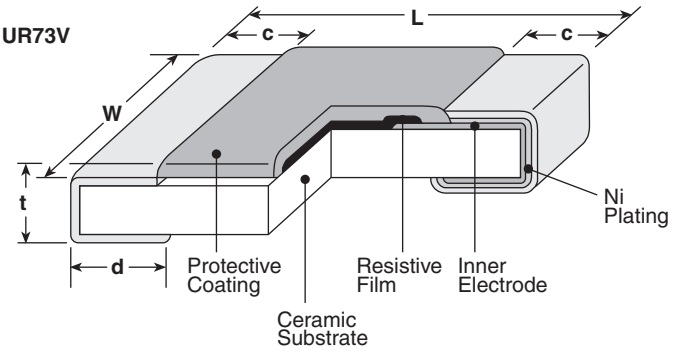


features

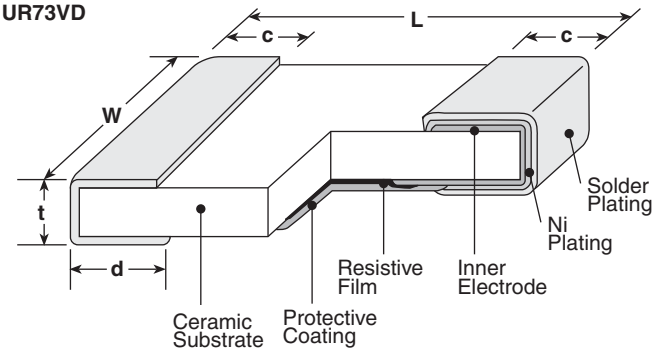
- Current detecting resistors for power supplies, motor circuits, etc.
- Low resistance (100mΩ or under) and high accuracy (±1%) for current detection
- High reliability and performance with T.C.R. ±100x10^{-6}/K
- Suitable for flow and reflow solderings
- Products will meet EU RoHS requirements
- AEC-Q200 qualified

dimensions and construction

UR73V



UR73VD



Size Code	Resistance Range (Ω)	Dimensions inches (mm) L	W	c	d	t
UR73VD 2B (1206)	10m~13m	.126±.008 (3.2±0.2)	.063±.008 (1.6±0.2)	.016±.012 (0.4±0.3)	.049±.008 (1.25±0.2)	.024±.004 (0.6±0.1)
	15m~16m				.045±.008 (1.15±0.2)	
	18m~20m				.043±.008 (1.1±0.2)	
	22m~27m				.039±.008 (1.0±0.2)	
UR73V 2B (1206)	30m~33m	.126±.008 (3.2±0.2)	.063±.008 (1.6±0.2)	.039±.012 (1.0±0.3)	.016 $^{+.008}_{-.004}$ (0.4 $^{+0.2}_{-0.1}$)	.024±.004 (0.6±0.1)
	36m~39m			.035±.012 (0.9±0.3)		
	43m~100m			.026±.012 (0.65±0.3)		

ordering information

New Part #

UR73V	2B	T	TD	30L0	F
Type	**Power Rating**	**Termination Material**	**Packaging**	**Nominal Resistance**	**Tolerance**
UR73V UR73VD: Face-down	2B: 0.5W	T: Sn	TD: 4mm pitch punch paper	4 characters Ex: 30L0: 30mΩ R100: 100mΩ 10L0: 10mΩ	F: ±1%

For further information on packaging, please refer to Appendix A.

12/03/15

applications and ratings

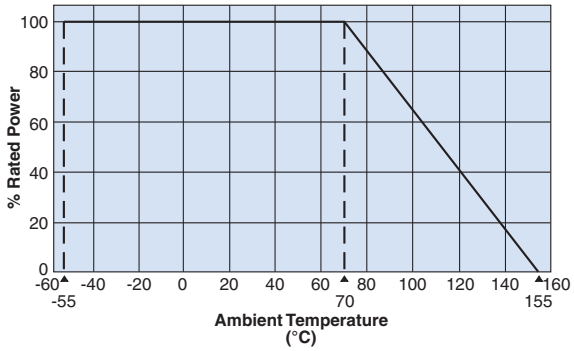
Part Designation	Power* Rating	Rated Ambient Temperature	Rated Terminal Temperature	T.C.R. ($X10^{-6}$/K)	Resistance Range (Ω) E24 & 25m, 50m	Resistance Tolerance	Operating Temperature Range
UR73V 2B	0.5W	70°C	90°C	±100	30m~100m	F: ±1%	-55°C to +155°C
UR73VD 2B	0.5W			±100	12m~27m		
				0~+250	10m~11m		

* Rated voltage = $\sqrt{\text{Power Rating X Resistance Value}}$

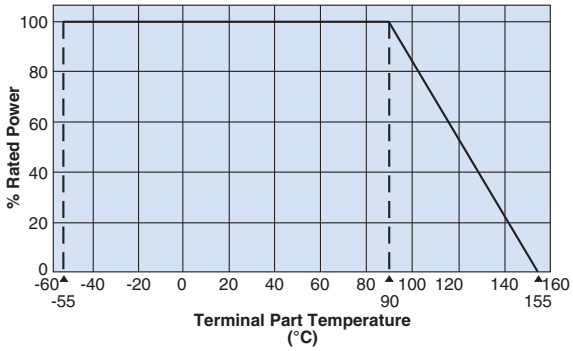
If any questions should arise whether to use the "Rated Ambient Temperature" or the "Rated Terminal Part Temperature," please give priority to the "Rated Terminal Part Temperature." Prior to use and for more details refer to "Introduction of the derating curves on the terminal part temperature" in the beginning of the catalog.

environmental applications

Derating Curve



For resistors operated at an ambient temperature of 70°C or above, the power rating shall be derated in accordance with the above derating curve.



For resistors operated at a terminal part temperature of 90°C or above, the power rating shall be derated in accordance with the above derating curve.
Please refer to "Introduction of the derating curve based on the terminal part temperature" in the beginning of our catalog prior use.

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%	±0.5%	Rated voltage x 2.5 for 5 seconds
Resistance to Solder Heat	±1%	±0.3%	260°C ± 5°C, 10 ± 1 second
Rapid Change of Temperature	±1%	±0.5%	-55°C (30 minutes), +125°C (30 minutes), 100 cycles
Moisture Resistance	±2%	±1%	40°C ± 2°C, 90%~95%RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
Endurance at 70°C	±2%	±1%	70°C ± 2°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
High Temperature Exposure	±1%	±0.3%	+155°C, 1000 hours