



# low resistance, low T.C.R. flat chip resistor

### features

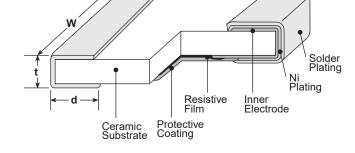


- Current detecting resistors for power supplies, motor circuits, etc.
- Low resistance (100m $\Omega$  or under) and high accuracy (±1%) for current detection
- High reliability and performance with T.C.R. ±75x10<sup>-6</sup>/K
- · Suitable for flow and reflow solderings
- Products will meet EU RoHS requirements
- AEC-Q200 qualified

UR73V C					
W	Ni Plating				
← d → Protective Coating	Resistive Inner Film Electrode				
Ceramic Substrate					

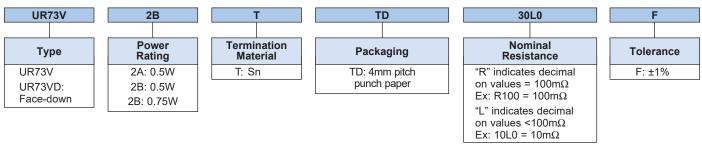
dimensions and construction

Size	Resistance	<b>Dimensions</b> inches ( <i>mm</i> )				
Code	Range (Ω)	L	W	с	d	t
UR73VD 2A	10m~16m	.079±.008	.049±.008 (1.25±0.2)	.016±.008 (0.4±0.2)	.028±.008 (0.7±0.2)	.024±.004 (0.6±0.1)
(0805)		(2.0±0.2)			.024±.008 (0.6±0.2)	
UR73V 2A (0805)	39m~100m	.079±.008 (2.0±0.2)	.049±.008 (1.25±0.2)	.016±.008 (0.4±0.2)	.016±.008 (0.4±0.2)	.024±.004 (0.6±0.1)
	10m~13m		.063±.008 (1.6±0.2)	.016±.012 (0.4±0.3)	.049±.008 (1.25±0.2)	.024±.004 (0.6±0.1)
UR73VD		.126±.008 (3.2±0.2)			.045±.008 (1.15±0.2)	
	18m~20m				.043±.008 (1.1±0.2)	
	22m~27m				.039±.008 (1.0±0.2)	
	30m~33m	.126±.008 (3.2±0.2)	.063±.008 (1.6±0.2)	.039±.012 (1.0±0.3)	0.4.0 + 008	.024±.004 (0.6±0.1)
UR73V 2B (1206)	36m~39m			.035±.012 (0.9±0.3)	.016 <sup>+.008</sup> / <sub>004</sub> (0.4 <sup>+0.2</sup> / <sub>-0.1</sub> )	
	43m~100m			.026±.012 (0.65±0.3)	-0.1	



c

## ordering information



4 C -

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

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use. 10/25/18

sense

UR73VD





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#### applications and ratings

Part Designation	Power* Rating	Rated Ambient Temperature	Rated Terminal Temperature	T.C.R. (X10⁵/K)	Resistance Range (Ω) E24 & 25m, 50m	Resistance Tolerance	Operating Temperature Range	
UR73V 2A	0.5W	70°C	100°C	±75	39m~100m			
UR73VD 2A 0.5W	70°C	100°C	±75	15m~36m				
			0~+150	12m~13m				
						0~+250	10m~11m	
0.5W	70°C	125°C	±75	33m~75m				
			125 C	±100	30m, 82m~100m	F: ±1%	-55°C to	
UR73V 2B 0.75W**		110°C	±75	33m~75m	F. ±1%	+155°C		
			±100	30m, 82m~100m				
0.5W	70°C	7000		40500	0~+250	10m~11m	I	
		125°C	±75	12m~27m				
UR73VD 2B	0.75\\//**	110%0	0~+250	10m, 11m				
	0.75W**		110°C	±75	12m~27m			

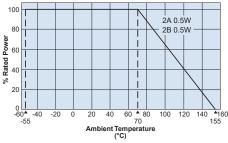
\* Rated voltage =  $\sqrt{Power Rating X Resistance Value}$ 

\*\* Please keep the resistor operating according to the derating curve of the terminal part temperature based on the specified power rating.

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.

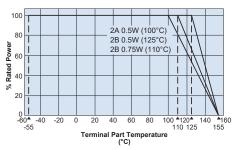
#### environmental applications

#### **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.

**Performance Characteristics** 



For resistors operated at a terminal part temperature of described for each size 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.

	Requirement $\Delta$ R ±(%+0.005 $\Omega$ )		
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%	±0.5%	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

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10/25/18