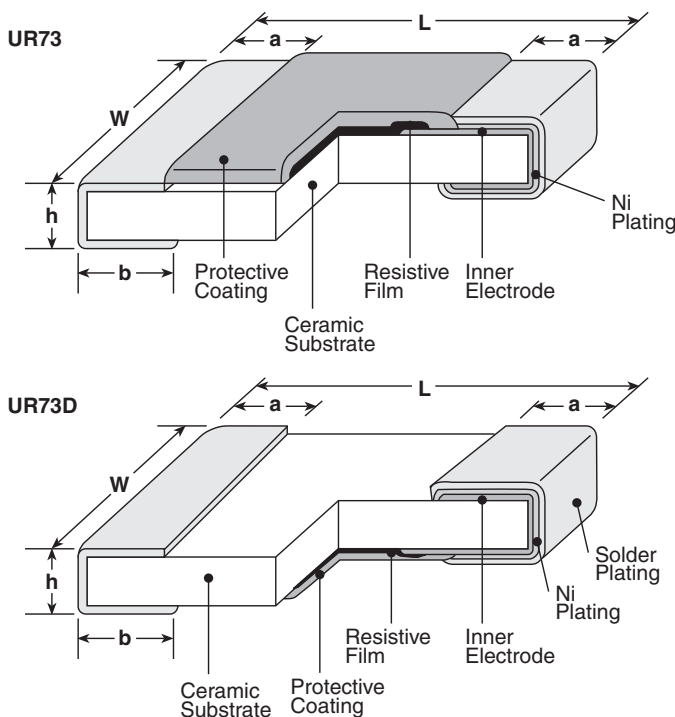


## features

- Very low resistance, high precision reliability
- Suitable for reflow and flow soldering
- Utilization of thick film
- Low T.C.R. achieved ( $\pm 100$  ppm/ $^{\circ}$ C)
- Marking: Indigo body color with white marking
- Products with lead-free terminations meet RoHS requirements. Pb located in glass material, electrode and resistor element is exempt per Annex 1, exemption 5 of EU directive 2005/95/EC

## dimensions and construction



NEW	Size Code	Resistance Range	Dimensions inches (mm)				
			L	W	h	a	b
	D1E	24m ~ 100m	.039 $\begin{smallmatrix} +.004 \\ -.002 \end{smallmatrix}$ (1.0 $\begin{smallmatrix} +0.1 \\ -.05 \end{smallmatrix}$ )	.020 $\begin{smallmatrix} +.004 \\ -.002 \end{smallmatrix}$ (0.5 $\begin{smallmatrix} +0.1 \\ -.05 \end{smallmatrix}$ )	.016 $\pm$ .002 (0.4 $\pm$ 0.05)	.010 $\pm$ .004 (0.25 $\pm$ 0.1)	.012 $\pm$ .004 (0.3 $\pm$ 0.1)
	D1J	10m ~ 27m 30m ~ 100m	.063 $\pm$ .008 (1.6 $\pm$ 0.2)	.031 $\begin{smallmatrix} +.005 \\ -.004 \end{smallmatrix}$ (0.8 $\begin{smallmatrix} +0.15 \\ -.1 \end{smallmatrix}$ )	.02 $\pm$ .004 (0.5 $\pm$ 0.1)	.014 $\pm$ .004 (0.35 $\pm$ 0.1)	.022 $\pm$ .004 (0.55 $\pm$ 0.1) .014 $\pm$ .004 (0.35 $\pm$ 0.1)
	D2A	10m ~ 16m 18m ~ 30m	.079 $\pm$ .008 (2.0 $\pm$ 0.2)	.049 $\pm$ .008 (1.25 $\pm$ 0.2)	.022 $\pm$ .004 (0.55 $\pm$ 0.1)	.016 $\pm$ .008 (0.4 $\pm$ 0.2)	.024 $\pm$ .008 (0.6 $\pm$ 0.2) .02 $\pm$ .008 (0.5 $\pm$ 0.2)
	2A	33m ~ 100m	.079 $\pm$ .008 (2.0 $\pm$ 0.2)	.049 $\pm$ .008 (1.25 $\pm$ 0.2)	.02 $\pm$ .004 (0.55 $\pm$ 0.1)	.016 $\pm$ .008 (0.4 $\pm$ 0.2)	.012 $\begin{smallmatrix} +.008 \\ -.004 \end{smallmatrix}$ (0.3 $\begin{smallmatrix} +0.2 \\ -.1 \end{smallmatrix}$ )
	D2B	10m ~ 16m 18m ~ 27m	.126 $\pm$ .008 (3.2 $\pm$ 0.2)	.063 $\pm$ .008 (1.6 $\pm$ 0.2)	.024 $\pm$ .004 (0.6 $\pm$ 0.1)	.020 $\pm$ .008 (0.5 $\pm$ 0.2)	.039 $\pm$ .008 (1.0 $\pm$ 0.2) .031 $\pm$ .008 (0.8 $\pm$ 0.2)
	2B	30m ~ 100m	.126 $\pm$ .008 (3.2 $\pm$ 0.2)	.063 $\pm$ .008 (1.6 $\pm$ 0.2)	.024 $\pm$ .004 (0.6 $\pm$ 0.1)	.020 $\pm$ .012 (0.5 $\pm$ 0.3)	.016 $\begin{smallmatrix} +.008 \\ -.004 \end{smallmatrix}$ (0.4 $\begin{smallmatrix} +0.2 \\ -.1 \end{smallmatrix}$ )
NEW	D2H	10m ~ 30m 33m ~ 100m	.197 $\pm$ .008 (5.0 $\pm$ 0.2)	.098 $\pm$ .008 (2.5 $\pm$ 0.2)	.026 $\pm$ .004 (0.65 $\pm$ 0.1)	.026 $\pm$ .012 (0.65 $\pm$ 0.3)	.063 $\pm$ .012 (1.6 $\pm$ 0.3) .026 $\pm$ .012 (0.65 $\pm$ 0.3)
	D3A	10m ~ 30m 33m ~ 100m	.248 $\pm$ .008 (6.3 $\pm$ 0.2)	.122 $\pm$ .008 (3.1 $\pm$ 0.2)	.024 $\pm$ .004 (0.6 $\pm$ 0.1)	.031 $\pm$ .012 (0.8 $\pm$ 0.3)	.079 $\pm$ .012 (2.0 $\pm$ 0.3) .031 $\pm$ .012 (0.8 $\pm$ 0.3)

## ordering information

New Part #	UR73	2A	T	TD	R10	F
Type	UR73 UR73D	Power Rating	Termination Material	Packaging	Nominal Resistance	Tolerance
		NEW 1E: 0.125W 1J: 0.2W 2A: 0.25W 2B: 0.5W NEW 2H: 0.75W 3A: 1W	T: Sn	TP: 2mm pitch punch paper (1E: 10,000 pcs/reel) TD: 7" punched paper tape (1J, 2A, 2B: 5,000 pcs/reel) TE: 7" embossed plastic (2H, 3A: 4,000 pcs/reel)	All values less than 0.1 $\Omega$ (100m $\Omega$ ) are expressed in m $\Omega$ with "L" as decimal. Ex: 20m $\Omega$ = 20L0	F: $\pm 1\%$

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

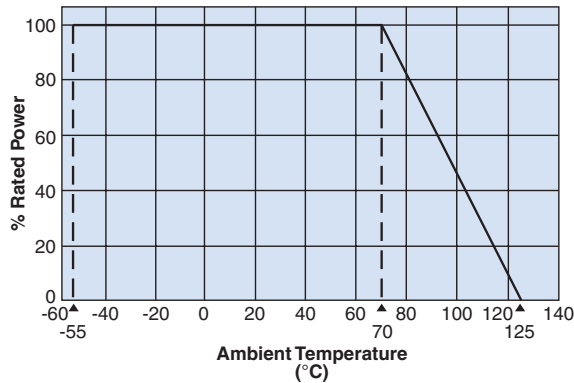
## applications and ratings

	Part Designation	Power Rating	T.C.R. (ppm/°C) Max.	Resistance Range	Absolute Maximum Working Voltage	Maximum Overload Voltage (5 sec. max.)	Operating Temperature Range
				F (±1%) E-24, 25mΩ, 50mΩ			
NEW	UR73D1E	1/8W (.125W)	±100	47m - 100mΩ	0.111V	0.279V	-55°C to +125°C
			±500	25mΩ			
NEW	UR73D1J	1/5W (.2W)	±100	47m - 100mΩ	0.141V	0.353V	
			±200	30m - 43mΩ			
			±300	10m - 27mΩ			
	UR73D2A	1/4W (.25W)	±250	10m - 30mΩ	0.086V	0.216V	
	UR732A	1/4W (.25W)	±100	47m - 100mΩ	0.158V	0.395V	
			±250	33m - 43mΩ			
	UR73D2B	1/2W (.5W)	±200	10m - 27mΩ	0.116V	0.290V	
	UR732B	1/4W (.25W) 1/2W (.5W)*	±100	47m - 100mΩ	0.158V	0.395V	
			±250	30m - 43mΩ			
NEW	UR73D2H	3/4W (.75W)	±250	10m - 30mΩ	0.274V	0.685V	
			±100	33m - 100mΩ			
		UR73D3A	1W (1W)	±250	10m - 30mΩ	0.316V	0.791V
	±100			33m - 100mΩ			

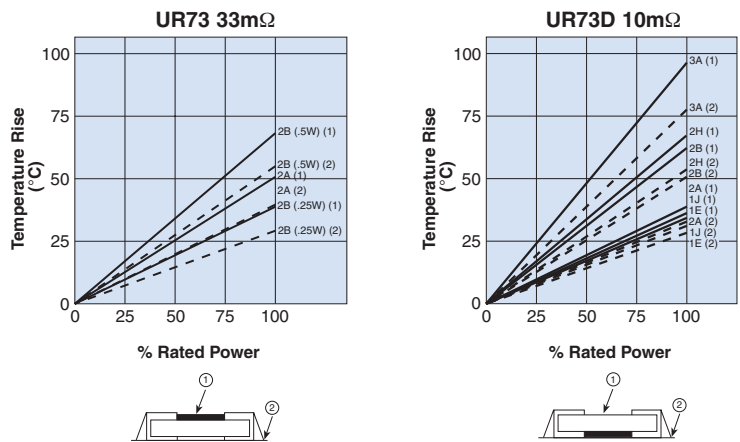
\* Please contact factory for Power Rating

## environmental applications

### Derating Curve



### Surface Temperature Rise - UR73 & UR73D



## Performance Characteristics

Parameter	Requirement Δ R	Test Method
Resistance to Solder Heat	± (1.0% + 0.005Ω)	MIL-R-55342 π 4.7.7, 260°C ± 5°C, 10 ± 1 sec.
Solderability	95% coverage minimum	4.17, 235°C ± 5°C, 2 + 0.5 sec.
Terminal Strength Bend	± (1.0% + 0.005Ω)	5mm minimum deflection in either direction for 10 sec.
Vibration	± (0.5% + 0.005Ω)	Each directions (3) for 2 hours
T.C.R.	Within specified	4.8, -55°C/+25°C/125°C
Short Time Overload	± (2.0% + 0.005Ω)	MIL-R-55342 π 4.7.5, 2.5 x RCWV for 5 sec.
Pulse	± (5.0% + 0.005Ω)	2.5 x RCWV, not exceeding maximum overload voltage, 1 sec. ON, 25 sec. OFF, 10,000 cycles
Thermal Shock	± (1.0% + 0.005Ω)	4.19 -40°C (30 min.), +125°C (30 min.), 50 cycles
High Temperature Exposure	± (1.0% + 0.005Ω)	4.23 125°C ± 3°C, 1000 hrs
Moisture Resistance	± (2.0% + 0.005Ω)	4.24 40°C ± 2°C, 90 - 95% RH, 1000 hrs
Life	± (2.0% + 0.005Ω)	4.25 70°C ± 3°C, 1000 hrs

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

3/06/07