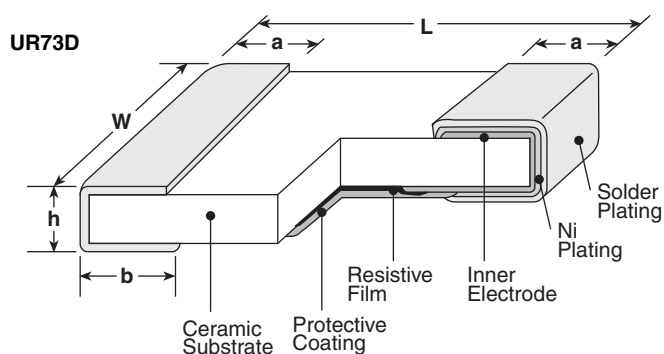
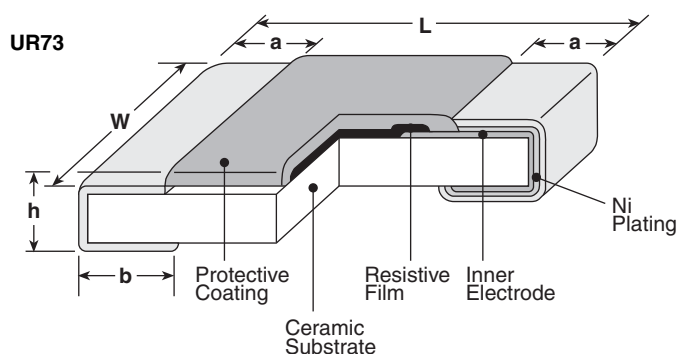


features

- Very low resistance, high precision reliability
- Suitable for reflow and flow soldering
- Utilization of thick film
- Low T.C.R. achieved (± 100 ppm/ $^{\circ}$ C)
- Marking: Indigo body color with white marking
- Products with lead-free terminations meet EU RoHS requirements



dimensions and construction



Size Code	Resistance Range	Dimensions inches (mm)				
		L	W	h	a	b
D1E	24m ~ 100m	$.039^{+.004}_{-.002}$	$.020^{+.004}_{-.002}$	$.016 \pm .002$	$.010 \pm .004$	$.012 \pm .004$
		(1.0 ^{+0.1} _{-0.05})	(0.5 ^{+0.1} _{-0.05})	(0.4 \pm 0.05)	(0.25 \pm 0.1)	(0.3 \pm 0.1)
D1J	10m ~ 27m	$.063 \pm .008$	$.031^{+.005}_{-.004}$	$.02 \pm .004$	$.014 \pm .004$	$.022 \pm .004$
	30m ~ 100m	(1.6 \pm 0.2)	(0.8 ^{+0.15} _{-0.1})	(0.5 \pm 0.1)	(0.35 \pm 0.1)	$.014 \pm .004$ (0.35 \pm 0.1)
D2A	10m ~ 16m	$.079 \pm .008$	$.049 \pm .008$	$.022 \pm .004$	$.016 \pm .008$	$.024 \pm .008$
	18m ~ 30m	(2.0 \pm 0.2)	(1.25 \pm 0.2)	(0.55 \pm 0.1)	(0.4 \pm 0.2)	$.02 \pm .008$ (0.5 \pm 0.2)
2A	33m ~ 100m	$.079 \pm .008$	$.049 \pm .008$	$.02 \pm .004$	$.016 \pm .008$	$.012^{+.008}_{-.004}$ (0.3 ^{+0.2} _{-0.1})
D2B	10m ~ 16m	$.126 \pm .008$	$.063 \pm .008$	$.024 \pm .004$	$.020 \pm .008$	$.039 \pm .008$
	18m ~ 27m	(3.2 \pm 0.2)	(1.6 \pm 0.2)	(0.6 \pm 0.1)	(0.5 \pm 0.2)	$.031 \pm .008$ (0.8 \pm 0.2)
2B	30m ~ 100m	$.126 \pm .008$	$.063 \pm .008$	$.024 \pm .004$	$.020 \pm .012$	$.016^{+.008}_{-.004}$ (0.4 ^{+0.2} _{-0.1})
D2H	10m ~ 30m	$.197 \pm .008$	$.098 \pm .008$	$.026 \pm .004$	$.026 \pm .012$	$.063 \pm .012$
	33m ~ 100m	(5.0 \pm 0.2)	(2.5 \pm 0.2)	(0.65 \pm 0.1)	(0.65 \pm 0.3)	$.026 \pm .012$ (0.65 \pm 0.3)
D3A	10m ~ 30m	$.248 \pm .008$	$.122 \pm .008$	$.024 \pm .004$	$.031 \pm .012$	$.079 \pm .012$
	33m ~ 100m	(6.3 \pm 0.2)	(3.1 \pm 0.2)	(0.6 \pm 0.1)	(0.8 \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
		1E: 0.125W 1J: 0.2W 2A: 0.25W 2B: 0.5W 2H: 0.75W 3A: 1W	T: Sn	TP: 2mm pitch punch paper (1E) TD: 7" punched paper tape (1J, 2A, 2B) TE: 7" embossed plastic (2H, 3A)	All values less than 0.1 Ω (100m Ω) are expressed in m Ω with "L" as decimal. Ex: 20m Ω = 20L0	F: $\pm 1\%$

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.

12/16/08

applications and ratings

NEW	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			
	UR73D1E	1/8W (.125W)	±100	30m - 100mΩ	$\sqrt{P \cdot R}$	$\sqrt{P \cdot R} \times 2.5$	-55°C to +125°C
			±500	24m - 27mΩ			
	UR73D1J	1/5W (.2W)	±100	47m - 100mΩ			
			±200	30m - 43mΩ			
			±300	10m - 27mΩ			
	UR73D2A	1/4W (.25W)	±250	10m - 30mΩ			
	UR732A	1/4W (.25W)	±100	47m - 100mΩ			
			±250	33m - 43mΩ			
	UR73D2B	1/2W (.5W)	±200	10m - 27mΩ			
	UR732B	1/4W (.25W) 1/2W (.5W)*	±100	47m - 100mΩ			
			±200	30m - 43mΩ			
	UR73D2H	3/4W (.75W)	±250	10m - 30mΩ			
			±100	33m - 100mΩ			
	UR73D3A	1W (1W)	±250	10m - 30mΩ			
			±100	33m - 100mΩ			

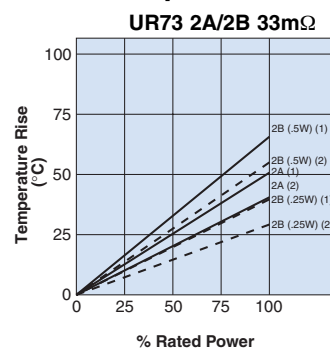
* Please contact factory for Power Rating

environmental applications

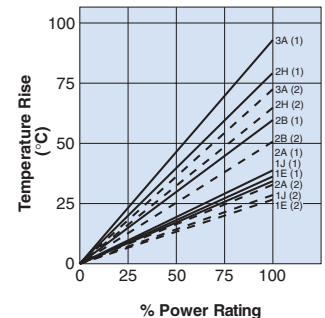
Derating Curve



Surface Temperature Rise



UR73D 1J, 2A, 2B, 2H, 3A 10mΩ UR73D 1E 24mΩ



Performance Characteristics

Parameter	Requirement ΔR		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/+125°C
Overload (Short time)	±2%	±0.5%	Rated power 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%	+125°C, 1000 hours

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

11/06/09