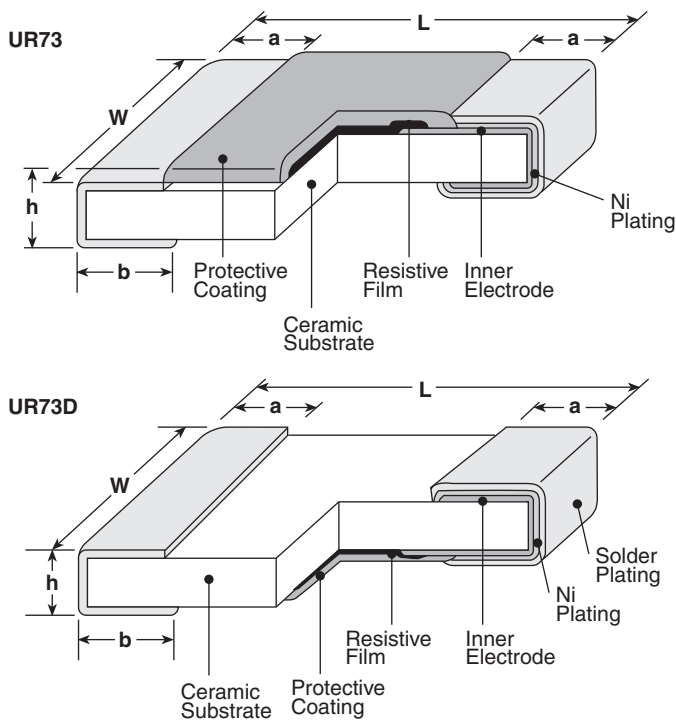


features

- 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

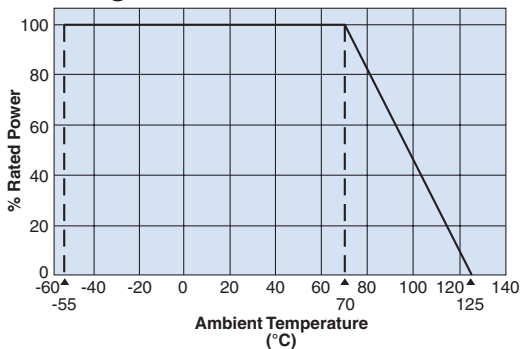
applications and ratings

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	$\sqrt{P^*R}$	$\sqrt{P^*R} \times 2.5$	-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			

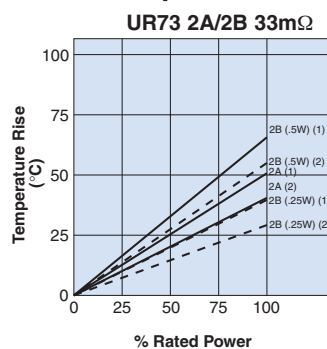
* Please contact factory for Power Rating

environmental applications

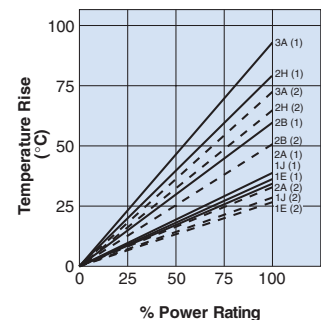
Derating Curve



Surface Temperature Rise



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



Performance Characteristics

Parameter	Requirement Δ R		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.

1/08/09