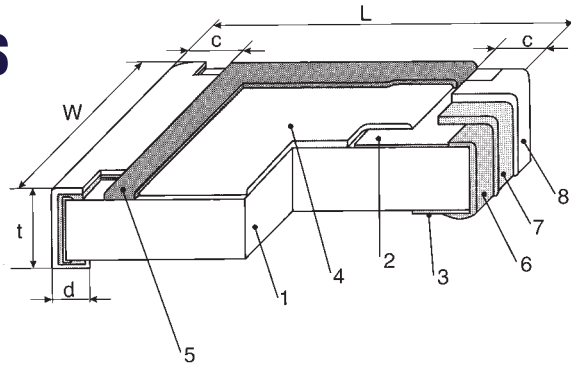


THERMAL SENSORS LINEAR PTC, THICK FILM LA 73



STRUCTURE

- 1 Ceramic substrate
- 2 Top termination
- 3 Bottom termination
- 4 Thick film resistor element
- 5 Protective layer
- 6 End termination
- 7 Diffusion barrier (Ni)
- 8 Solder plating

IDENTIFICATION

PRODUCT CODE	COATING COLOR	MARKING
LA73 1E, 1J	Orange	No marking
LA73 2A, 2B		Black, 3 digits

Products with Pb-free terminations meet RoHS requirements

TYPE DESIGNATION (HOW TO ORDER)

Old Part No.	LA73	600	1E	J	TP	1K2			
New Part No. (Pb-free)	LA73		1E		T	TP	122	J	0600
	PRODUCT CODE	T.C.R. (ppm/K)	STYLE 1E, 1J, 2A, 2B (1E only with termination "T")	RESISTANCE TOLERANCE	TERMINATION SURFACE MATERIAL T: Sn L: Sn/Pb	TAPING* TP, TD, BK	NOMINAL RESISTANCE 3 digits	RESISTANCE TOLERANCE J: ±5%	T.C.R. (ppm/K) 4 digits

*Please see "PACKAGING"

FEATURES

- Resistance value changes in linear positive way to temperature
- Quick response to the change of temperature
- Anti-leaching nickel barrier terminations
- 15 specific temperature coefficients
- Meets or exceeds IEC 60115-8, JIS C 5201-8
- Rated ambient temperature: +70°C
- Operating temperature range: -55°C ... +125°C
- Suitable for reflow and wave soldering

RATING

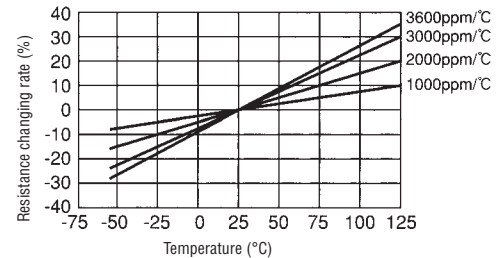
SIZE	TYPE	POWER* RATING	THERMAL DISSIPATION CONSTANT	MAX. WORKING VOLTAGE
0402	LA73 1E	0.016W	6.8 mW/K	10 V
0603	LA73 1J	0.063W	7.6 mW/K	25 V
0805	LA73 2A	0.1W	8.2 mW/K	50 V
1206	LA73 2B	0.125W	9 mW/K	50 V

*For resistors operated at an ambient temperature of +70°C or above, the power rating shall be derated.

DIMENSIONS (mm)

SIZE	TYPE	L	W	C	d	t ± 0.1
0402	LA73 1E	1.0 ± 0.1	0.5 ± 0.1	0.2 ± 0.1	0.25 ± 0.1	0.35
0603	LA73 1J	1.6 ± 0.2	0.8 ± 0.1	0.3 ± 0.1	0.3 ± 0.1	0.45
0805	LA73 2A	2.0 ± 0.2	1.25 ± 0.1	0.4 ± 0.2	0.3 ± ^{+0.2} / _{-0.1}	0.5
1206	LA73 2B	3.2 ± 0.2	1.6 ± 0.2	0.5 ± 0.3	0.4 ± ^{+0.2} / _{-0.1}	0.6

TEMPERATURE CHARACTERISTICS



TCR AND RESISTANCE RANGE

T.C.R.* (ppm/K)	T.C.R. TOLERANCE	RESISTANCE RANGE • E12				RESISTANCE TOLERANCE
		1E (0402)	1J (0603)	2A (0805)	2B (1206)	
600	± 150 ppm/K	1.2 kΩ ~ 2.2 kΩ	—	—	—	J (± 5%)
800		1.2 kΩ ~ 2.2 kΩ	—	—	—	
1000	± 200 ppm/K	—	1 kΩ ~ 10 kΩ	1 kΩ ~ 10 kΩ	1 kΩ ~ 10 kΩ	
1200		—	680 Ω ~ 6.8 kΩ	680 Ω ~ 6.8 kΩ	680 Ω ~ 6.8 kΩ	
1400		—	470 Ω ~ 4.7 kΩ	470 Ω ~ 4.7 kΩ	470 Ω ~ 4.7 kΩ	
1600		—	470 Ω ~ 3.9 kΩ	470 Ω ~ 3.9 kΩ	470 Ω ~ 3.9 kΩ	
1800		—	330 Ω ~ 2.7 kΩ	330 Ω ~ 2.7 kΩ	330 Ω ~ 2.7 kΩ	
2000		—	330 Ω ~ 2.7 kΩ	330 Ω ~ 2.7 kΩ	330 Ω ~ 2.7 kΩ	
2200	± 10%	—	220 Ω ~ 1.8 kΩ	220 Ω ~ 1.8 kΩ	220 Ω ~ 1.8 kΩ	
2400		—	220 Ω ~ 1.2 kΩ	220 Ω ~ 1.2 kΩ	220 Ω ~ 1.2 kΩ	
2600		—	100 Ω ~ 1.2 kΩ	100 Ω ~ 1.2 kΩ	100 Ω ~ 1.2 kΩ	
2800		—	100 Ω ~ 390 Ω	100 Ω ~ 390 Ω	100 Ω ~ 390 Ω	
3000		—	68 Ω ~ 220 Ω	68 Ω ~ 220 Ω	68 Ω ~ 220 Ω	
3300		—	33 Ω ~ 120 Ω	33 Ω ~ 120 Ω	33 Ω ~ 120 Ω	
3600	—	22 Ω ~ 82 Ω	22 Ω ~ 82 Ω	22 Ω ~ 82 Ω	22 Ω ~ 82 Ω	

* T.C.R. Measuring Temperature +25°C / +75°C
The resistance value of this resistor changes by its self-heating by power applied. Therefore, it is recommended to take its self-heating into consideration. Care must be taken that the resistors may be damaged by occurrence or application of the static electricity in equipment assembling processes.