



FEATURES

- **Very Low Resistance**
- **Suitable for Current Limiting, Current Detection, Motor Control, Power Supply and Hard Disk Drives**
- **High Precision and Excellent Accuracy for Current Detection**
- Good Electrical Characteristics
- Surface Mount Package
- Nickel Barrier Solder-Coated Pads [e3]
- Reflow capable per JEDEC J-STD-020, 260°C maximum
- Tape and Reel Packaging
- **RoHS Compliant in Accordance with EU Directive 2005/95/EC**
 - Lead-Free Termination Finish
 - Exemption 5 for Pb in glass material and resistor elements



ORDERING INFORMATION



Notes:

1. No dashes or spaces to appear in part number.
2. Example Part Numbers:
 - 73L4R10J [1206 pkg., 0.10 Ohms, ±5%]
 - 73L3R51F [0805 pkg., 0.51 Ohms, ±1%]
 - 73E6R056J [2010 pkg., 0.056 Ohms, ±5%]
 - 73E4R068F [1206 pkg., 0.068 Ohms, ±1%]

**Not all performance combinations and resistor values may be available.
Contact your local CTS Representative or CTS Customer Service for availability.**

ORDERING INFORMATION

STANDARD RESISTOR VALUES

Standard Resistance Values (Based on EIA E24 Sequence)

3-Digit Code

73Lx	Resistor Value	Resistor Code	Resistor Value	Resistor Code	Resistor Value	Resistor Code	Resistor Value	Resistor Code
	0.100Ω	R10	0.180Ω	R18	0.330Ω	R33	0.560Ω	R56
	0.110Ω	R11	0.200Ω	R20	0.360Ω	R36	0.620Ω	R62
	0.120Ω	R12	0.220Ω	R22	0.390Ω	R39	0.680Ω	R68
	0.130Ω	R13	0.240Ω	R24	0.430Ω	R43	0.750Ω	R75
	0.150Ω	R15	0.270Ω	R27	0.470Ω	R47	0.820Ω	R82
	0.160Ω	R16	0.300Ω	R30	0.510Ω	R51	0.910Ω	R91

Standard Resistance Values (Based on EIA E24 Sequence)

4-Digit Code

73Ex	Resistor Value	Resistor Code	Resistor Value	Resistor Code	Resistor Value	Resistor Code	Resistor Value	Resistor Code
	0.050Ω	R050	0.056Ω	R056	0.068Ω	R068	0.082Ω	R082
	0.051Ω	R051	0.062Ω	R062	0.075Ω	R075	0.091Ω	R091

ELECTRICAL CHARACTERISTICS

Type	Package Code Inch (mm)	Rated Wattage (Watts)	Tolerance (%)	Resistance E-24 (Ω)	T.C.R (ppm/°C)	Operating Temperature Range
73L0	0201 (0603)	0.063	J = ±5	0.27 - 0.91	± 300	-55°C to +125°C
73L1	0402 (1005)	0.100	G = ±2 J = ±5	0.20 - 0.91	± 300	-55°C to +125°C
73L2	0603 (1608)	0.100	G = ±2 J = ±5	0.20 - 0.91	± 300	-55°C to +125°C
73L3	0805 (2012)	0.125	F = ±1	0.20 - 0.91	± 200	-55°C to +125°C
			G = ±2 J = ±5	0.10 - 0.91		
73L4	1206 (3216)	0.250	F = ±1	0.20 - 0.91	± 100	-55°C to +125°C
			G = ±2 J = ±5	0.10 - 0.91		
73L5	1210 (3225)	0.500	F = ±1	0.20 - 0.91	± 100	-55°C to +125°C
			G = ±2 J = ±5	0.10 - 0.91		
73L6	2010 (5025)	0.750	F = ±1	0.20 - 0.91	± 100	-55°C to +125°C
			G = ±2 J = ±5	0.10 - 0.91		
73L7	2512 (6432)	1.000	F = ±1	0.20 - 0.91	± 200	-55°C to +125°C
			G = ±2 J = ±5	0.10 - 0.91		
73E3	0805 (2012)	0.250	F = ±1 G = ±2 J = ±5	0.050 - 0.091	± 100	-55°C to +125°C
73E4	1206 (3216)	0.500	F = ±1 G = ±2 J = ±5	0.050 - 0.091	± 100	-55°C to +125°C
73E6	2010 (5025)	1.000	F = ±1 G = ±2 J = ±5	0.050 - 0.091	± 100	-55°C to +125°C

MECHANICAL SPECIFICATION

PACKAGE DRAWING

Type	Package Code Inch (mm)	Dimensions (mm)				
		L	W	c	d	t
73L0	0201 (0603)	0.60 ±0.03	0.30 ±0.03	0.12 ±0.05	0.15 ±0.05	0.23 ±0.03
73L1	0402 (1005)	1.00 ±0.05	0.50 ±0.03	0.20 ±0.10	0.25 ±0.10	0.35 ±0.05
73L2	0603 (1608)	1.60 ±0.15	0.80 +0.2 -0.1	0.25 ±0.20	0.25 ±0.20	0.50 +0.15 -0.05
73L3 73E3	0805 (2012)	2.00 +0.2 -0.1	1.25 +0.2 -0.1	0.40 ±0.20	0.40 ±0.20	0.50 +0.15 -0.05
73L4 73E4	1206 (3216)	3.20 +0.1 -0.15	1.60 +0.1 -0.15	0.50 ±0.20	0.50 ±0.20	0.55 +0.15 -0.05
73L5	1210 (3225)	3.20 +0.1 -0.15	2.60 +0.1 -0.15	0.50 ±0.20	0.50 ±0.20	0.55 +0.15 -0.05
73L6 73E6	2010 (5025)	5.00 ±0.15	2.50 ±0.15	0.60 ±0.20	0.60 ±0.25	0.56 ±0.15
73L7	2512 (6432)	6.30 ±0.15	3.20 ±0.15	0.60 ±0.25	0.60 ±0.25	0.56 ±0.15



MARKING

Type	Part Marking
73L0	None
73L1	
73L2	
73L3	
73L4	
73L5	
73L6	
73L7	"R" is the decimal point 3 digits (E24): First two numbers are effective numbers in ohms (?). Example: "R20" = 0.20?
73E3	
73E4	
73E6	

RECOMMENDED LAND PATTERN



Type	Dimensions (mm)		
	A	B	C
73L0	0.36	1.00	0.40
73L1	0.60	2.00	0.70
73L2	1.00	3.00	1.20
73L3 73E3	1.20	4.00	1.65
73L4 73E4	2.20	5.00	2.00
73L5	2.20	5.00	2.90
73L6 73E6	3.20	6.60	3.00
73L7	4.20	8.20	3.70

PACKAGING INFORMATION

PAPER TAPE [mm], For Type 73L0 – 73L5, 73E3 and 73E4

Type	A	B	t
73L0	0.38 ±0.05	0.68 ±0.05	0.48 ±0.05
73L1	0.70 ±0.08	1.20 ±0.08	0.50 ±0.10
73L2	1.10 ±0.20	1.90 ±0.20	0.70 ±0.10
73L3 73E3	1.65 ±0.20	2.40 ±0.20	0.80 ±0.20
73L4 73E4	2.00 ^{+1.1} -0.15	3.75 ^{+0.1} -0.15	0.80 ±0.20
73L5	2.90 ±0.10	3.60 ±0.10	0.80 ±0.20



REEL [mm]

Type	Package Code Inch (mm)	Qty/Reel	A (mm)
73L0	0201 (0603)	15,000	11.4 ±1.1
73L1	0402 (1005)	10,000	11.4 ±1.1
73L2	0603 (1608)	5,000	11.4 ±1.1
73L3 73E3	0805 (2012)	5,000	11.4 ±1.1
73L4 73E4	1206 (3216)	5,000	11.4 ±1.1
73L5	1210 (3225)	5,000	11.4 ±1.1
73L6 73E6	2010 (5025)	4,000	15.4 ±1.0
73L7	2512 (6432)	4,000	15.4 ±1.0



EMBOSSED TAPE [mm], For Type 73L6, 73L7 and 73E6

Type	A	B
73L6 73E6	2.90 ±0.10	5.30 ±0.10
73L7	3.40 ±0.10	6.60 ±0.10

