

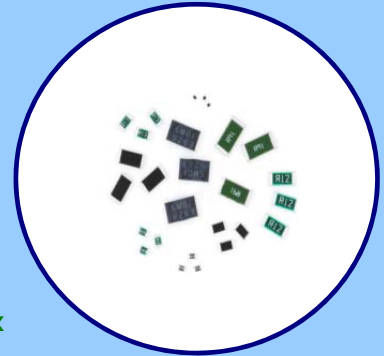
SERIES 73WLX & 73WEX

CURRENT SENSING RESISTORS

WIDE TERMINAL CHIP TYPE

FEATURES

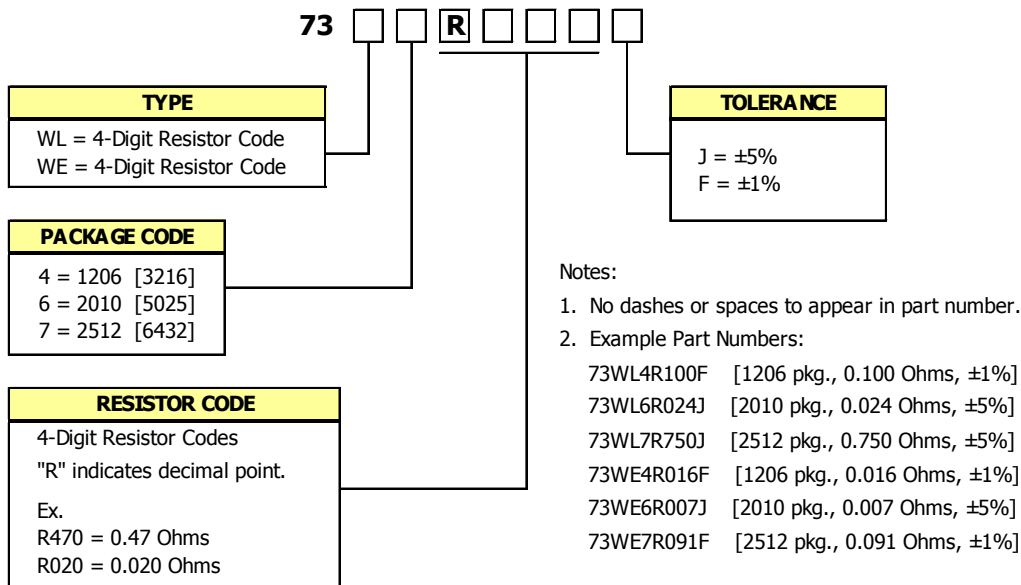
- Thick Film Construction – Wide Terminal Configuration
- Power Rating @ +70°C, Options 0.75 – 2 Watts
- Resistance Range, 5 – 910 milliohms
- Operating Temperature to +155°C
- EIA Standard Package Sizes
- Terminal Finish – Tin (e3)
- Reflow capable per JEDEC J-STD-020, 260°C maximum
- Tape and Reel Packaging
- Lead-Free Design – 73WEx
- RoHS Compliant in Accordance with EU Directive 2011/65/EU – 73WLx
 - Lead-Free Termination Finish
 - Exemption 7(c)-I, Electrical and electronic components containing lead [Pb] in glass



APPLICATIONS

Ideal for applications such as current detection and limiting, regulated battery circuits, motor control, power supply, hard disk drives, inverter/converter, industrial equipment and automotive.

ORDERING INFORMATION



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 E-24 Sequence]

4-Digit Code

73WLx

Resistor Value	Resistor Code	Resistor Value	Resistor Code	Resistor Value	Resistor Code	Resistor Value	Resistor Code	Resistor Value	Resistor Code
0.010Ω	R010	0.030Ω	R030	0.082Ω	R082	0.240Ω	R240	0.680Ω	R680
0.011Ω	R011	0.033Ω	R033	0.091Ω	R091	0.270Ω	R270	0.750Ω	R750
0.012Ω	R012	0.036Ω	R036	0.100Ω	R100	0.300Ω	R300	0.820Ω	R820
0.013Ω	R013	0.039Ω	R039	0.110Ω	R110	0.330Ω	R330	0.910Ω	R910
0.015Ω	R015	0.043Ω	R043	0.120Ω	R120	0.360Ω	R360		
0.016Ω	R016	0.047Ω	R047	0.130Ω	R130	0.390Ω	R390		
0.018Ω	R018	0.051Ω	R051	0.150Ω	R150	0.430Ω	R430		
0.020Ω	R020	0.056Ω	R056	0.160Ω	R160	0.470Ω	R470		
0.022Ω	R022	0.062Ω	R062	0.180Ω	R180	0.510Ω	R510		
0.024Ω	R024	0.068Ω	R068	0.200Ω	R200	0.560Ω	R560		
0.027Ω	R027	0.075Ω	R075	0.220Ω	R220	0.620Ω	R620		

Standard Resistance Values [Based on EIA E-24 Sequence]

4-Digit Code

73WEx

Resistor Value	Resistor Code	Resistor Value	Resistor Code	Resistor Value	Resistor Code	Resistor Value	Resistor Code	Resistor Value	Resistor Code
0.005Ω	R005	0.011Ω	R011	0.020Ω	R020	0.036Ω	R036	0.075Ω	R075
0.006Ω	R006	0.012Ω	R012	0.022Ω	R022	0.039Ω	R039	0.082Ω	R082
0.007Ω	R007	0.013Ω	R013	0.024Ω	R024	0.043Ω	R043	0.091Ω	R091
0.008Ω	R008	0.015Ω	R015	0.027Ω	R027	0.056Ω	R056		
0.009Ω	R009	0.016Ω	R016	0.030Ω	R030	0.062Ω	R062		
0.010Ω	R010	0.018Ω	R018	0.033Ω	R033	0.068Ω	R068		

ELECTRICAL CHARACTERISTICS

Type	Package Code Inch [mm]	Rated Wattage * [Watts]	Tolerance [%]	Resistance E-24 [mΩ]	T.C.R [ppm/°C]	Operating Temperature Range	Working Voltage [max V]	Overload Voltage [max V]
73WL4	1206 [3216]	0.75	F = ±1 J = ±5	100 - 910 10 - 33 36 - 91 100 - 910	±200 ±500 ±350 ±200	-55°C to +155°C	200	400
73WL6	2010 [5025]	1.0	F = ±1 J = ±5	100 - 910 10 - 33 36 - 91 100 - 910	±200 ±500 ±350 ±200	-55°C to +155°C		
73WL7	2512 [6432]	2.0	F = ±1 J = ±5	100 - 910 10 - 33 36 - 91 100 - 910	±200 ±500 ±350 ±200	-55°C to +155°C		

* @ +70°C.

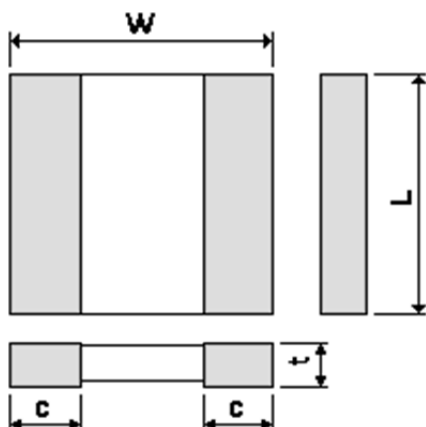
Type	Package Code Inch [mm]	Rated Wattage * [Watts]	Tolerance [%]	Resistance E-24 [mΩ]	T.C.R [ppm/°C]	Operating Temperature Range
73WE4	1206 [3216]	0.75	F = ±1 J = ±5	10 - 91 5 - 91	±100	-55°C to +155°C
73WE6	2010 [5025]	1.0	F = ±1 J = ±5	10 - 91 5 - 91	±100	-55°C to +155°C
73WE7	2512 [6432]	2.0	F = ±1 J = ±5	10 - 91 5 - 91	±100	-55°C to +155°C

* @ +70°C.

MECHANICAL SPECIFICATION

PACKAGE DRAWING

Type	Package Code Inch [mm]	Dimensions [mm]				
		L	W	t	c	d
73WL4 73WE4	1206 [3216]	3.2 ±0.15	1.6 ±0.15	0.55 +0.15 -0.05	0.30 ±0.20	0.50 ±0.20 0.30 ±0.20
73WL6 73WE6	2010 [5025]	5.00 ±0.20	2.50 ±0.20	0.56 ±0.15	0.50 ±0.20	0.60 ±0.20 0.50 ±0.20
73WL7 73WE7	2512 [6432]	6.30 ±0.20	3.20 ±0.20	0.56 ±0.15	0.50 ±0.20 0.60 ±0.20	0.90 ±0.20 0.60 ±0.20



NOTES

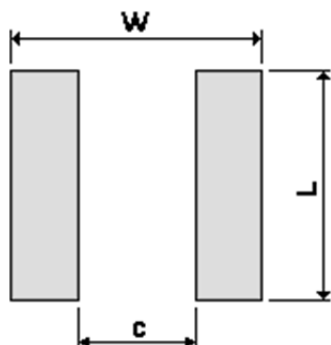
- Terminal:
Base Metal – Silver [Ag] or Copper [Cu] plate.
Barrier Plating - Nickel [Ni].
Finish Plating – Matte Tin [Sn].

RECOMMENDED LAND PATTERN

Type	Dimensions [mm]		
	C	L	W
73WL4 73WE4	0.65	3.20	2.65
73WL6 73WE6	1.30	5.00	4.00
73WL7 73WE7	1.45	6.40	4.85

MARKING

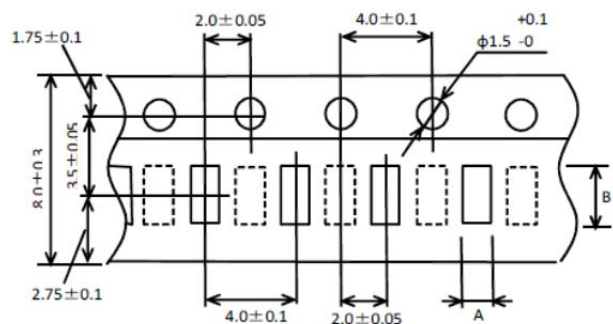
Type	Part Marking
73WL4	Rxxx = "R" is the decimal point and 3 digits [E24] are significant values. See resistor tables for codes.
73WL6	
73WL7	
73WE4 73WE6 73WE7	None



PACKAGING INFORMATION

PAPER TAPE

Type	A		B		t
73WL4	2.00	+0.10	3.57	+0.10	0.80 ±0.20
73WE4	2.00	-0.15	3.57	-0.15	0.80 ±0.20



※0603 and 1005 sizes contain parts in sections also and shall be 2 mm pitch.



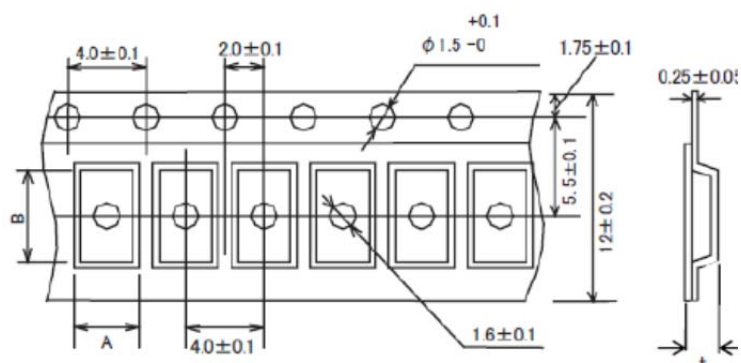
Except 0603 size,
bottom tape exists.



Only 0603 size do not
have bottom tape.

EMBOSSED TAPE

Type	A		B		t
73WL6	2.90	±0.10	5.30	±0.10	1.00 ±0.10
73WE6	2.90	±0.10	5.30	±0.10	1.00 ±0.10
73WL7	3.40	±0.10	6.60	±0.10	1.00 ±0.10
73WE7	3.40	±0.10	6.60	±0.10	1.00 ±0.10



REEL

Type	Quantity Per Reel	W	M	A	B	C	D
73WL4	5,000	13.0 ±1.4	180	2.5 ±0.6	13.5 ±0.6	21.9 ±0.6	60
73WE4	5,000	13.0 ±1.4					
73WL6	4,000	17.0 ±1.4					
73WE6	4,000	17.0 ±1.4					
73WL7	4,000	17.0 ±1.4	180	2.5 ±0.6	13.5 ±0.6	21.9 ±0.6	60
73WE7	4,000	17.0 ±1.4					

