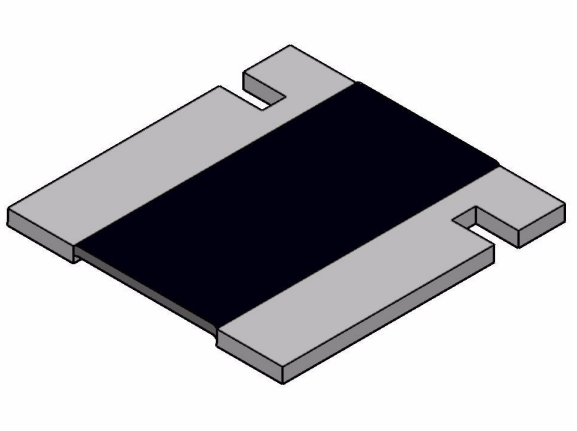
Power Metal Strip® Resistors, Low Value, Surface Mount, 4-Terminal



FEATURES

- 4-Terminal design allows for 0.5% resistance tolerance down to 0.003Ω
- Ideal for all types of current sensing, voltage division and pulse applications including switching and linear power supplies, instruments and power amplifiers
- Proprietary processing technique produces extremely low resistance values
- All welded construction
- Solid metal Nickel-chrome alloy resistive element
- Solderable terminations
- Enscapsulated with a high temperature coating
- Very low inductance, .5ηH to 5ηH
- Excellent frequency response

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	POWER RATING $P_{70°C}$ W	TOLERANCE %	RESISTANCE RANGE Ω
WSL3637	3.0	0.5 & 1.0	0.001 - 0.01

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	WSL3637
Temperature Coefficient	ppm/°C	0.001Ω - 0.0299Ω = ± 75 0.003Ω - 0.010Ω = ± 50
Operating Temperature Range	°C	- 65 / + 170
Maximum Working Voltage	V	$(P \times R)^{1/2}$
Weight/1000 pcs	g	274.3

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: WSL36375L000FEA (preferred part numbering format)

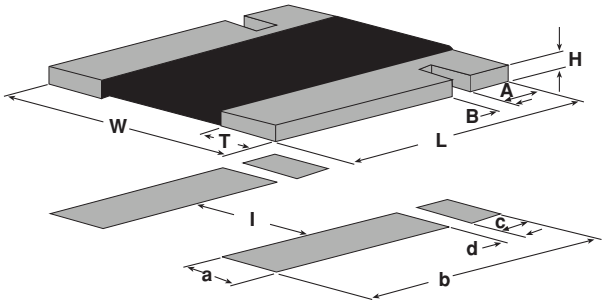
W	S	L	3	6	3	7	5	L	0	0	0	F	E	A		

GLOBAL MODEL	VALUE	TOLERANCE	PACKAGING	SPECIAL
WSL3637	**L** = Miliohm **R** = Decimal **5L000** = 0.005Ω **R0100** = 0.01Ω	**D** = ± 0.5% **F** = ± 1.0%	**EA** = Lead Free, tape/reel **EK** = Lead Free, Bulk **TA** = Tin/Lead, tape/reel (R86) **BA** = Tin/Lead, bulk (B43)	(Dash Number) (up to 2 digits) From **1-99** as applicable

Historical Part Number example: WSL3637 0.005Ω 1% EA (will continue to be accepted)

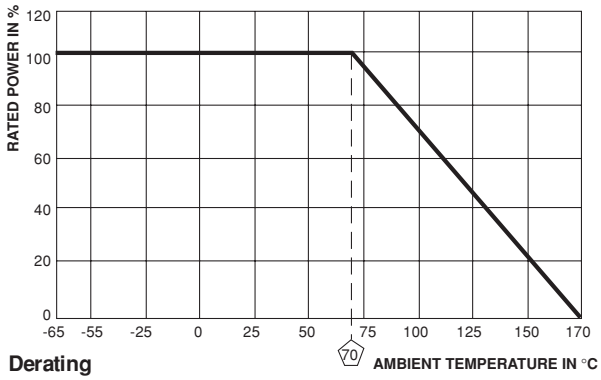
WSL3637	0.005Ω	1%	EA
HISTORICAL MODEL	RESISTANCE VALUE	TOLERANCE CODE	PACKAGING

DIMENSIONS



MODEL	DIMENSIONS in inches [millimeters]						
	RESISTANCE RANGE Ω	L	W	H	T	A	B
WSL3637	0.002 - 0.01	0.370 ± 0.010 [9.40 ± 0.254]	0.360 ± 0.010 [9.14 ± 0.254]	0.025 ± 0.010 [0.635 ± 0.254]	0.086 ± 0.010 [2.18 ± 0.254]	0.061 ± 0.010 [1.55 ± 0.254]	0.032 ± 0.010 [0.813 ± 0.254]
	0.001 - 0.0019	0.370 ± 0.010 [9.40 ± 0.254]	0.360 ± 0.010 [9.14 ± 0.254]	0.025 ± 0.010 [0.635 ± 0.254]	0.138 ± 0.010 [3.51 ± 0.254]	0.061 ± 0.010 [1.55 ± 0.254]	0.032 ± 0.010 [0.813 ± 0.254]

MODEL	SOLDER PAD DIMENSIONS in inches [millimeters]					
	RESISTANCE RANGE Ω	a	b	c	d	l
WSL3637	0.002 - 0.01	0.116 [2.95]	0.366 [9.30]	0.066 [1.68]	0.024 [0.610]	0.178 [4.52]
	0.001 - 0.0019	0.168 [4.27]	0.366 [9.30]	0.066 [1.66]	0.024 [0.610]	0.074 [1.88]



Derating

PERFORMANCE

TEST	CONDITIONS OF TEST	TEST LIMITS
Thermal Shock	- 55°C to + 150°C, 1000 cycles, 15 minutes at each extreme	± (0.5% + 0.0005Ω)ΔR
Short Time Overload	5 x Rated Power for 5 seconds	± (0.5% + 0.0005Ω)ΔR
Low Temperature Storage	- 65°C for 24 hours	± (0.5% + 0.0005Ω)ΔR
High Temperature Exposure	1000 hours @ + 170°C	± (1.0% + 0.0005Ω)ΔR
Bias Humidity	+ 85°C, 85% RH, 10% Bias, 1000 hours	± (0.5% + 0.0005Ω)ΔR
Mechanical Shock	100g's for 6 milliseconds, 5 pulses	± (0.5% + 0.0005Ω)ΔR
Vibration	Frequency varied 10 to 2000Hz in 1 minute, 3 directions, 12 hours	± (0.5% + 0.0005Ω)ΔR
Load Life	1000 hours @ rated power, +70°C, 1.5 hours "ON", 0.5 hours "OFF"	± (1.0% + 0.0005Ω)ΔR
Solder Heat	+ 260°C Solder, 10-12 second dwell, 25mm/second emergence	± (0.5% + 0.0005Ω)ΔR
Moisture Resistance	MIL-STD-202, Method 106, 0% power, 7a and 7b not required	± (0.5% + 0.0005Ω)ΔR

PACKAGING

MODEL	REEL			
	TAPE WIDTH	DIAMETER	PIECES/REEL	CODE
WSL3637	16mm/Embossed Plastic	330mm/13"	4000	EA

Embossed carrier tape per EIA-481-2