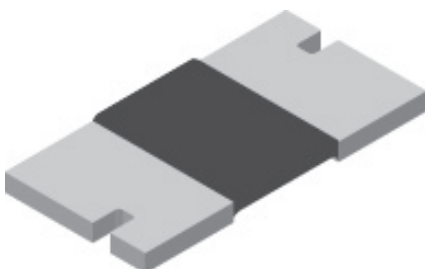


Power Metal Strip[®] Resistors, Low Value, Surface Mount, 4 - Terminal



FEATURES

- 4-Terminal design allows for 1% tolerance down to 0.001Ω and 0.5% tolerance down to 0.003Ω
- Ideal for all types of precision current sensing, voltage division and pulse applications including switching and linear power supplies, instruments, power amplifiers
- Proprietary processing technique produces extremely low resistance values
- All welded construction
- Solid metal Nickel-Chrome or Manganese-Copper alloy resistive element
- Solderable terminations
- Very low inductance 0.5nH to 5nH
- Excellent frequency response

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	POWER RATING $P_{70^{\circ}\text{C}}$ W	RESISTANCE RANGE Ω	
		± 0.5%	± 1.0%
WSK2512	1.0	0.003 – 0.025	0.001 – 0.025

- Part Marking: DALE, Value, Tolerance; due to resistor size limitations some resistance values will be marked with only the resistance value.

TECHNICAL SPECIFICATIONS

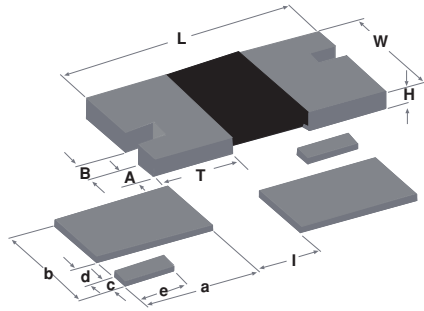
PARAMETER	UNIT	WSK2512
Temperature Coefficient	ppm/°C	0.001Ω - 0.0029Ω = ± 250 0.003Ω - 0.0049Ω = ± 75 0.005Ω - 0.025Ω = ± 35
Operating temperature range	°C	- 65 / + 170
Maximum Working Voltage	V	$(P \times R)^{1/2}$
Weight/1000 pieces	g	63.6

ORDERING INFORMATION

WSK2512	0.001Ω	1%	R86
MODEL	RESISTANCE Ω	TOLERANCE ± %	PACKAGING B43 = Bulk Pack R86 = Tape and Reel

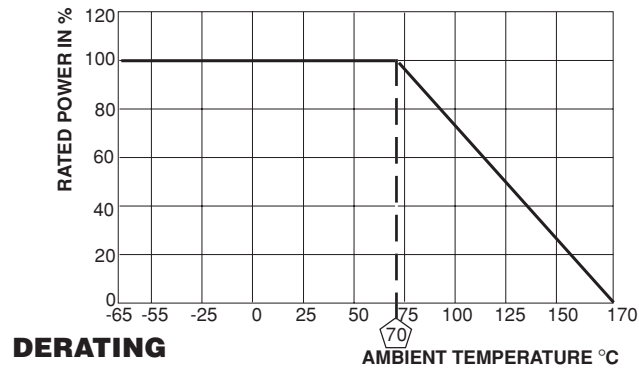


DIMENSIONS



MODEL	DIMENSIONS in inches [millimeters]						
	RESISTANCE RANGE Ω	L	W	H	T	A	B
WSK2512	0.001 – 0.0049	0.250 $\pm$ 0.010 [6.35 $\pm$ 0.254]	0.125 $\pm$ 0.010 [3.18 $\pm$ 0.254]	0.025 $\pm$ 0.010 [0.635 $\pm$ 0.254]	0.087 $\pm$ 0.010 [2.21 $\pm$ 0.254]	0.030 $\pm$ 0.010 [0.762 $\pm$ 0.254]	0.020 $\pm$ 0.010 [0.508 $\pm$ 0.254]
	0.005 - 0.025	0.250 $\pm$ 0.010 [6.35 $\pm$ 0.254]	0.125 $\pm$ 0.010 [3.18 $\pm$ 0.254]	0.025 $\pm$ 0.010 [0.635 $\pm$ 0.254]	0.047 $\pm$ 0.010 [1.19 $\pm$ 0.254]	0.030 $\pm$ 0.010 [0.762 $\pm$ 0.254]	0.020 $\pm$ 0.010 [0.508 $\pm$ 0.254]

MODEL	SOLDER PAD DIMENSIONS in inches [millimeters]					
	a	b	c	d	e	l
WSK2512	0.125 [3.18]	0.130 [3.30]	0.030 [0.76]	0.020 [0.51]	0.055 [1.40]	0.065 [1.65]



PERFORMANCE		
TEST	CONDITIONS OF TEST	TEST LIMITS
Thermal Shock	- 55°C to + 150°C, 1000 cycles, 15 minutes at each extreme	$\pm (0.5\% + 0.0005\Omega)\Delta R$
Short Time Overload	5 x power for 5 seconds	$\pm (0.5\% + 0.0005\Omega)\Delta R$
Low Temperature Storage	- 65°C for 24 hours	$\pm (0.5\% + 0.0005\Omega)\Delta R$
High Temperature Exposure	1000 hours at + 170°C	$\pm (1.0\% + 0.0005\Omega)\Delta R$
Bias Humidity	+ 85°C, 85% RH, 10% Bias, 1000 hours	$\pm (0.5\% + 0.0005\Omega)\Delta R$
Mechanical Shock	100g's for 6 milliseconds, 5 pulses	$\pm (0.5\% + 0.0005\Omega)\Delta R$
Vibration	Frequency varied 10 to 2,000Hz in one minute, 3 directions, 12 hours	$\pm (0.5\% + 0.0005\Omega)\Delta R$
Load Life	1,000 hours @ rated power, + 70°C, 1.5 hours "ON", 0.5 hours "OFF"	$\pm (1.0\% + 0.0005\Omega)\Delta R$
Resistance to Solder Heat	+ 260°C Solder, 10 – 12 second dwell, 25mm/second emergence	$\pm (0.5\% + 0.0005\Omega)\Delta R$
Moisture Resistance	MIL-STD-202 Method 106, 0% power, 7a and 7b not required	$\pm (0.5\% + 0.0005\Omega)\Delta R$

PACKAGING				
MODEL	REEL			
	TAPE WIDTH	DIAMETER	PIECES/REEL	CODE
WSK2512	12mm/Embossed Plastic	178mm/7"	2000	R86

Embossed carrier tape per EIA-481-1A