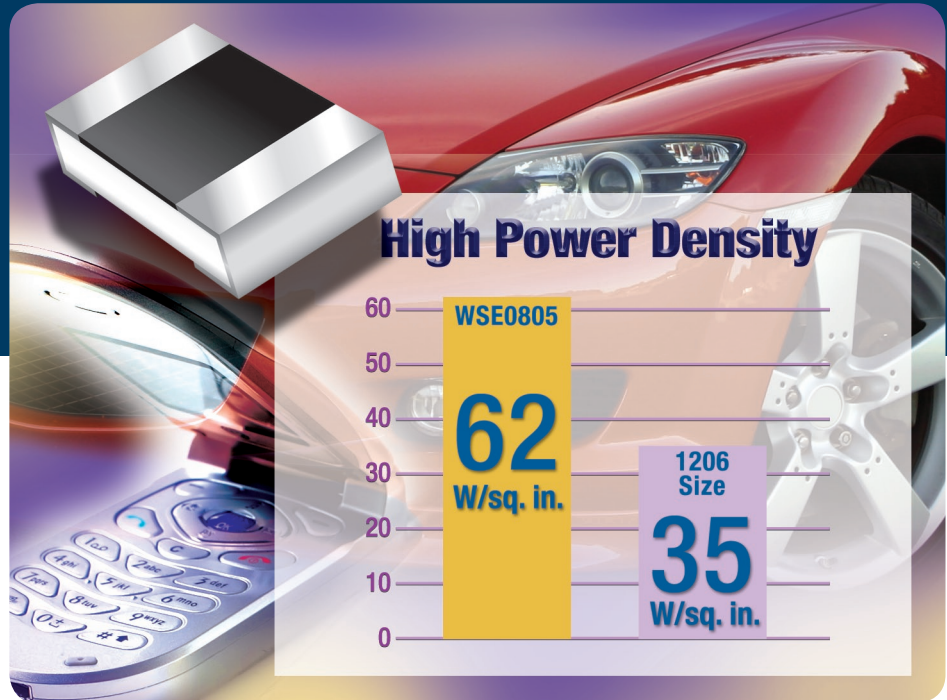




# POWER METAL STRIP® RESISTORS

WSE0805



## 0.25-Watt Surface-Mount Power Metal Strip®

Extended Resistance Range of 10  $\Omega$  to 10 k $\Omega$

### KEY BENEFITS

- 0.25-watt power rating with an 0805 case size
- Smaller footprint than a 1206 resistor (uses 40 % less board space)
- Tolerance down to 0.1 %
- TCR down to 15 ppm/ $^{\circ}\text{C}$
- Superior overload and pulse-handling capabilities

### APPLICATIONS

- Voltage amplifier circuits
- Precision voltage divider circuits
- High-frequency circuits

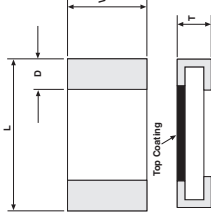
# Power Metal Strip® Resistors (Extended Range) Surface Mount

## FEATURES

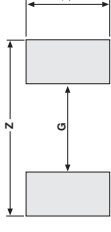
- 0805 size resistors with 0.25 watt power rating
- Smaller footprint than a 1206 resistor (uses 40 % less board space)
- Superior overload and pulse handling capability
- SMD alternative for low power leaded wirewound resistors
- Low TCR 15 ppm/°C
- Low noise: < -40 dB
- Voltage Coefficient: < 0.00001 %/volt (< 0.1 ppm/V)
- Very low inductance: < 0.08 µH



## DIMENSIONS



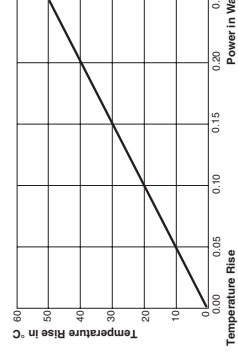
## RECOMMENDED LAND PATTERN



MODEL	DIMENSIONS in inches (millimeters)						
	D	L	W	T	G <sup>1)</sup>	X <sup>1)</sup>	Z <sup>1)</sup>
WSE0805	0.015 ± 0.005 (0.38 ± 0.13)	0.080 ± 0.005 (2.30 ± 0.13)	0.050 ± 0.005 (1.27 ± 0.13)	0.025 max (0.64 max)	0.028 ± 0.004 (0.70 ± 0.10)	0.050 ± 0.004 (1.27 ± 0.10)	0.122 ± 0.004 (3.103 ± 0.10)

## Note

1. Land pattern dimensions (G, X, Z) are per IPC-782A



## PERFORMANCE

TEST	CONDITIONS OF TEST	TEST LIMITS
Thermal Shock	- 65 °C to + 150 °C, 100 cycles, 15 minutes at each extreme	± 0.10 % ΔR
Short Time Overload	5 x rated power for 5 seconds	± 0.10 % ΔR
Low Temperature Operation	- 65 °C, 0.25 W for 45 minutes	± 0.05 % ΔR
High Temperature Exposure	100 hours at + 150 °C	± 0.10 % ΔR
Moisture Resistance	MIL-STD-202, Method 106, 0 % power, 7b not required	± 0.10 % ΔR
Lead Life	1000 hours at 70 °C, 1.5 hours "ON", 0.5 hours "OFF"	± 0.05 % ΔR
Resistance to Bonding Exposure	260 °C for 10 seconds	± 0.10 % ΔR

## PACKAGING

MODEL	TAPE WIDTH	DIAMETER	REEL	PIECES/REEL	CODE
WSE0805	8 mm/Punched Paper	178 mm/7"	5000	5000	EA

## Note

- Embossed Carrier Tape per EIA-481-1A

Revision 13-Oct-06

STANDARD ELECTRICAL SPECIFICATIONS						
MODEL	SIZE	POWER RATING P <sub>W</sub> , c W	LIMITING ELEMENT VOLTAGE V	TEMPERATURE COEFFICIENT ppm/°K	RESISTANCE RANGE Ω	E-SERIES
WSE0805	0805	0.25	(P × R) <sup>1/2</sup>	15, 25	10 - 10K	96

## TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	WSE0805
Dielectric Withstanding Voltage	V <sub>Ac</sub>	200
Insulation Resistance	Ω	> 10 <sup>9</sup>
Operating Temperature Range	°C	- 65/+ 150
Weight/1000 pcs	G	5.5

## GLOBAL PART NUMBER INFORMATION

GLOBAL PART NUMBERING: WSE08051K500PXE A

W	S	E	0	8	0	5	1	K	5	0	0	F	X	E	A
GLOBAL MODEL WSE0805		RESISTANCE VALUE R = Decimal K = Thousand 100R0 = 100 Ω 4K000 = 4 kΩ		TOLERANCE CODE B = ± 0.1 % C = ± 0.25 % D = ± 0.5 % F = ± 1.0 %		TCR CODE X = ± 15 ppm/°C E = ± 25 ppm/°C		PACKAGING CODE EA = Lead (Pb)-free, Tape/Reel (up to 2 digits) EK = Lead (Pb)-free, Bulk from 1 - 99 as applicable		SPECIAL (Dash Number)					

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