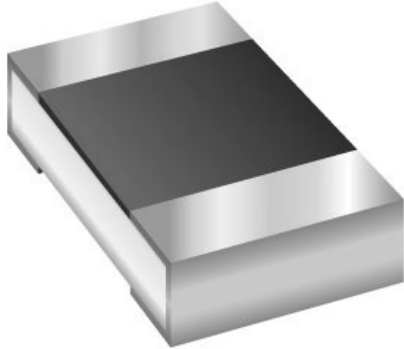


## Power Metal Strip® Resistors (Extended Range) Surface Mount



### FEATURES

- 0805 size resistors with 0.25 W 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 %/V (< 0.1 ppm/V)
- Very low inductance: < 0.08 μH

### STANDARD ELECTRICAL SPECIFICATIONS

MODEL	SIZE	POWER RATING $P_{70\text{ }^\circ\text{C}}$ W	LIMITING ELEMENT VOLTAGE V	TEMPERATURE COEFFICIENT ppm/K	RESISTANCE RANGE	E-SERIES
					Ω	
WSE0805	0805	0.25	$(P \times R)^{1/2}$	15, 25	± 0.1 %, ± 0.25 %, ± 0.5 %, ± 1 %	96

### TECHNICAL SPECIFICATIONS

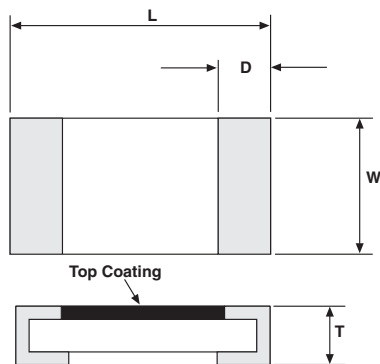
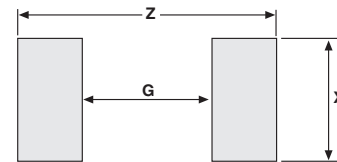
PARAMETER	UNIT	WSE0805
Dielectric Withstanding Voltage	$V_{AC}$	200
Insulation Resistance	Ω	> 10 <sup>9</sup>
Operating Temperature Range	°C	- 65 to + 150
Weight/1000 pieces	g	5.5

### GLOBAL PART NUMBER INFORMATION

GLOBAL PART NUMBERING: WSE08051K500FXEA



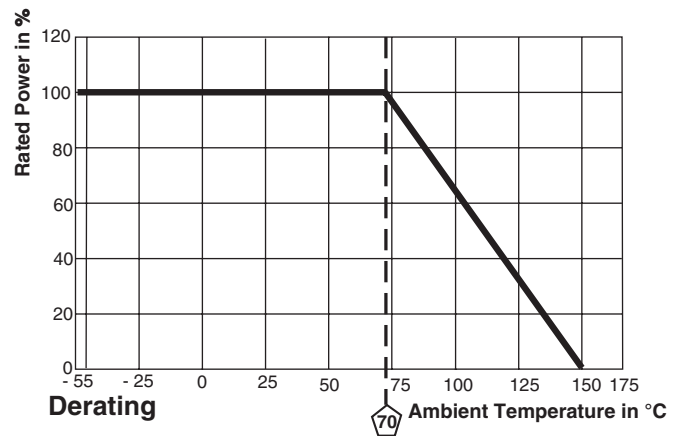
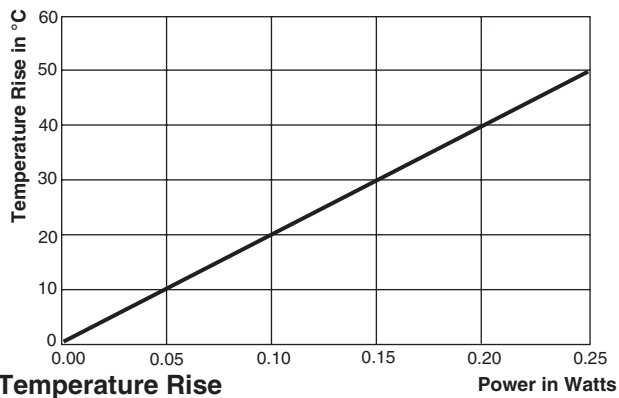
GLOBAL MODEL	RESISTANCE VALUE	TOLERANCE CODE	TCR CODE	PACKAGING CODE	SPECIAL
WSE0805	R = Decimal K = Thousand 100R0 = 100 Ω 4K000 = 4 kΩ	B = ± 0.1 % C = ± 0.25 % D = ± 0.5 % F = ± 1.0 %	X = ± 15 ppm/°C E = ± 25 ppm/°C	EA = Lead (Pb)-free, tape/reel EK = Lead (Pb)-free, bulk  TG = Tin/Lead, tape/reel (RT1) BA = Tin/Lead, bulk (B43)	(Dash Number) (up to 2 digits) from 1 - 99 as applicable

**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**

<sup>(1)</sup> 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 min at each extreme	± 0.10 % ΔR
Short Time Overload	5 x rated power for 5 s	± 0.10 % ΔR
Low Temperature Operation	- 65 °C, 0.25 W for 45 min	± 0.05 % ΔR
High Temperature Exposure	100 h at + 150 °C	± 0.10 % ΔR
Moisture Resistance	MIL-STD-202, Method 106, 0 % power, 7b not required	± 0.10 % ΔR
Load Life	1000 h at 70 °C, 1.5 h "ON", 0.5 h "OFF"	± 0.05 % ΔR
Resistance to Bonding Exposure	260 °C for 10 s	± 0.10 % ΔR

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

**Note**

- Embossed Carrier Tape per EIA-481-1A



## Disclaimer

All product specifications and data are subject to change without notice.

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