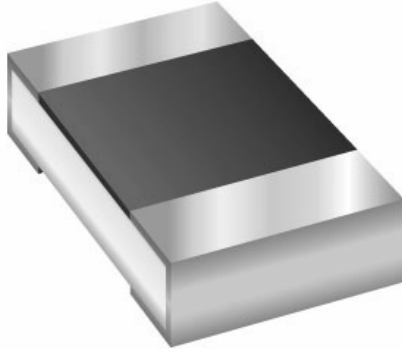


Power Metal Strip® Resistors (Extended Range), Surface Mount



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/K
- Low noise: < - 40 dB
- Voltage coefficient: < 0.00001 %/V (< 0.1 ppm/V)
- Very low inductance: < 0.08 µH
- Compliant to RoHS Directive 2002/95/EC



RoHS*
COMPLIANT
GREEN
(5-2009)**
Available

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	SIZE	POWER RATING $P_{70\text{ }^{\circ}\text{C}}$ W	LIMITING ELEMENT VOLTAGE V	TEMPERATURE COEFFICIENT $\pm$ ppm/K	TOLERANCE $\pm$ %	RESISTANCE RANGE Ω	E-SERIES
WSE0805	0805	0.25	$(P \times R)^{1/2}$	15, 25	0.1, 0.25, 0.5, 1.0	10 to 10K	96

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	WSE0805
Dielectric withstanding voltage	V_{AC}	200
Insulation resistance	Ω	$> 10^9$
Operating temperature range	$^{\circ}\text{C}$	- 65 to + 150
Weight/1000 pieces	g	5.5

GLOBAL PART NUMBER INFORMATION

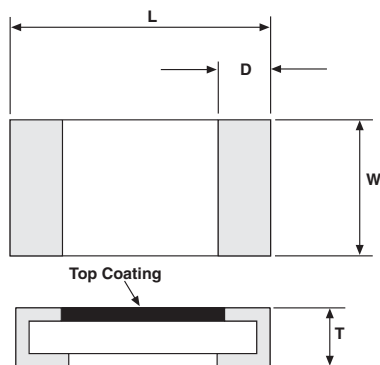
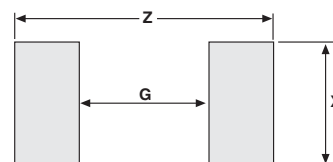
Global Part Numbering example: WSE08051K500FXEA

W S E 0 8 0 5 1 K 5 0 0 F X E A

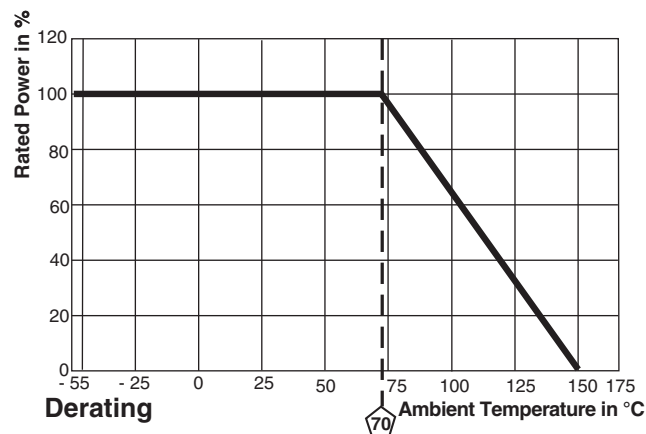
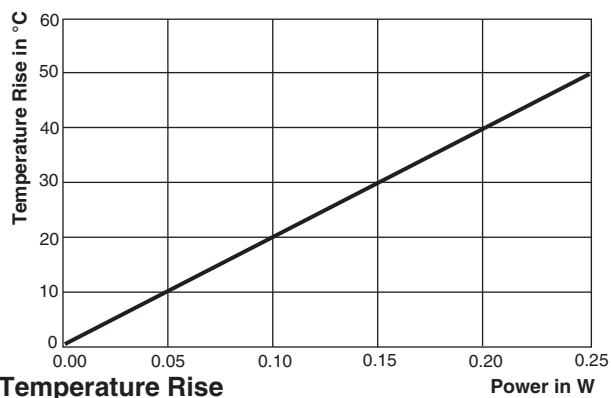
GLOBAL MODEL	RESISTANCE VALUE	TOLERANCE CODE	TCR CODE	PACKAGING CODE	SPECIAL
WSE0805	R = Decimal K = Thousand 100R0 = 100 Ω 4K000 = 4 k Ω	B = ± 0.1 % C = ± 0.25 % D = ± 0.5 % F = ± 1.0 %	X = ± 15 ppm/K E = ± 25 ppm/K	EA = Lead (Pb)-free, tape/reel EK = Lead (Pb)-free, bulk TG = Tin/Lead, tape/reel (RT1)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

* Pb containing terminations are not RoHS compliant, exemptions may apply

** Please see document "Vishay Material Category Policy": www.vishay.com/doc?99902

DIMENSIONS

RECOMMENDED LAND PATTERN


MODEL	DIMENSIONS in inches (millimeters)						
	D	L	W	T	G ⁽¹⁾	X ⁽¹⁾	Z ⁽¹⁾
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 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.



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