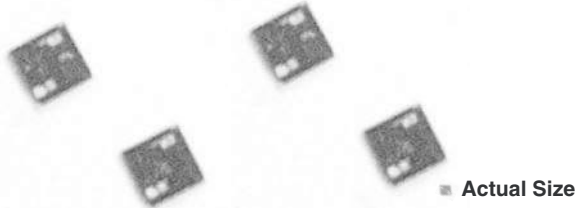


Single Value Chip Resistor



Chromium silicon thin film is very well suited to produce high density and high ohmic value resistor chips. These high ohmic value chip resistors are available with improved performances and size when compared to thick film counterparts.

FEATURES

- Small size 20 mil x 20 mil
- Very high ohmic value up to 10 MΩ
- Good stability 0.1 % (2000 h, rated power at + 70 °C)
- Wirebondable

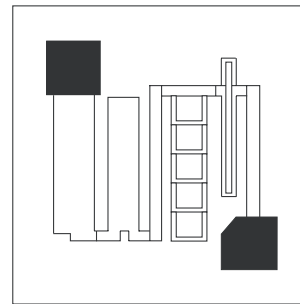
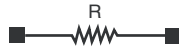


RoHS
COMPLIANT
GREEN
[5-2008]*

TYPICAL PERFORMANCE

	ABS
TCR	100 ppm/°C
TOL.	0.5 %

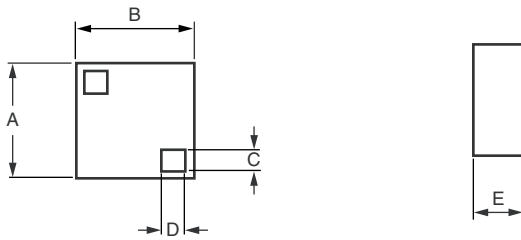
SCHEMATIC AND PATTERN



STANDARD ELECTRICAL SPECIFICATIONS		
TEST	SPECIFICATIONS	CONDITIONS
MATERIAL	PASSIVATED CHROMIUM SILICON	
Resistance range	10 kΩ to 10 MΩ	
Absolute TCR	± 100 ppm/°C (± 50 ppm/°C on request)	- 55 °C to + 155 °C
Absolute tolerance	± 0.5 %, ± 1 %, ± 2 %	
Power dissipation	100 mW at + 25 °C, 50 mW at + 70 °C, 25 mW at + 125 °C	
Stability	± 0.1 % typical, ± 0.2 maximum	2000 h at + 70 °C at Pn
Working voltage	100 V _{DC}	Higher on Al ₂ O ₃
Operating temperature range	- 55 °C to + 155 °C	
Storage temperature range	- 55 °C to + 155 °C	
Noise	< - 20 dB typical	MIL-STD-202 Method 308
Thermal EMF	< 0.01 μV/°C	
Shelf life stability	200 ppm	1 year at + 25 °C

* Please see document "Vishay Green and Halogen-Free Definitions (5-2008)" <http://www.vishay.com/doc?99902>

DIMENSIONS



DIMENSION	INCHES	MILLIMETERS
A	0.021 ± 0.002	0.55 ± 0.10
B	0.021 ± 0.002	0.55 ± 0.10
C	0.004	0.10
D	0.004	0.10
E	0.015	0.40 maximum

MECHANICAL SPECIFICATIONS	
Resistive element	Chromium Silicon
Passivation	Silicon Nitride
Substrate material	Silicon (consult Vishay for Al ₂ O ₃)
Bonding pads	Aluminum

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: CS22-100KD0016 (preferred part number format)

C	S	2	2	-	1	0	0	K	D	0	0	1	6
GLOBAL MODEL				VALUE			TOLERANCE			OPTION			
				Decimal R, K or M			D = ± 0.5 % F = ± 1.0 % G = ± 2.0 %			leave blank if no option			

Historical Part Number example: CS22 150K 0.5 % R0016 (will continue to be accepted)

CS22	150K	0.5 %	R0016
HISTORICAL MODEL	VALUE	TOLERANCE	OPTION



Disclaimer

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

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