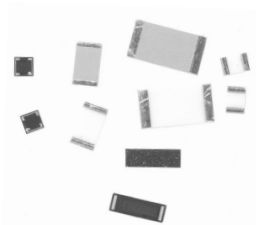


Single High Value Chip Resistors



Actual Size

These high value resistors are manufactured using thin film technology and are available with improved performance and size when compared to thick film counterparts.

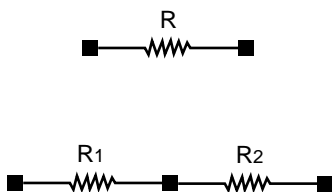
FEATURES

- Ohmic values to hundred megohms
- High Stability
- Low Noise
- Tight Tolerance

TYPICAL PERFORMANCE

	ABS
TCR	50
TOL	0.1

SCHEMATIC AND PATTERN



POWER RATING


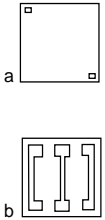

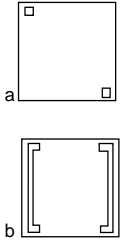

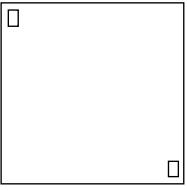
Pn @ +70°C {derate (To 0 @ +155°C)}		
CS	22	0.125W
CS	33	0.25W
CS	44	0.38W
CS	55	0.5W
CS	515	1W
CS	522	5W

STANDARD ELECTRICAL SPECIFICATIONS

TEST	SPECIFICATIONS	CONDITIONS
MATERIAL	PASSIVATED CHROMIUM SILICON	
Absolute TCR:	$\pm 50\text{ppm}/^\circ\text{C}$	- 55°C to + 125°C
Absolute Tolerance:	$\pm 0.1\%$	
Power Rating	See table above	
Stability (ΔR)	< 0.2%	1000 hrs. @ + 70°C
Voltage Coefficient	< 0.1ppm/Volt	
Working Voltage	100 Volts	
Operating Temperature Range	- 55°C to + 155°C	
Storage Temperature Range	- 55°C to + 155°C	
Noise	< - 35dB Typical	
Thermal EMF	< 0.01 $\mu\text{V}/^\circ\text{C}$	
Shelf Life Stability	200ppm	1 Year

VISHAY THIN FILM • FRANCE +33.4.93.37.28.24 FAX: +33.4.93.37.27.31 • GERMANY +49.9287.710 FAX: +49 9287.70435 • ISRAEL +972.3.557.0945 FAX: +972.3.558.9121
 • ITALY + 39.2.300.11919 FAX: +39.2.300.11999 • JAPAN +81.42.729.0661 FAX: +81.42.729.3400 • SINGAPORE +65.788.6668 FAX: +65.788.0988
 • SWEDEN +46.8.594.70590 FAX: +46.8.594.70581 • UK +44 191 514 8237 FAX: +44 1953 457 722 • USA: (610) 407-4800 FAX: (610) 640-9081



TYPE AND SIZE	CS 22	CS 33	CS 44	CS 55	CS 515	CS 522
Standard Configuration and Sizes	 (0.6 x 0.6)mm ²	 (0.8 x 0.8)mm ²	 (1 x 1)mm ²	 (1.3 x 1.3)mm ²	 (3.8 x 1.3)mm ²	 (6.5 x 6.5)mm ²
Max. Ohmic Value	5M	a=15M b=10M	40M	a=100M b=20M	100M	200M
Power Rating at + 25°C	0.125W	0.250W	0.38W	0.5W	1W	5W

MECHANICAL SPECIFICATIONS	
Resistive Element	Chromium Silicon
Substrate Material	Silicon
Passivation	Silicon Nitride
Bonding Pads	Aluminum

How to Order

Type	Size	T.C.R.	Ohmic Value	Tolerance	Termination
CS	22	H	1004	F	A
	22 33 44 55 515 522	H: ±50 ppm/°C K: ±100 ppm/°C Special orders on request.	The first three digits are significant figures and the last digit specifies the number of zero to follow.	B: ±0.1% D: ±0.5% F: ±1.0% G: ±2.0% J: ±5.0% K: ±10%	A : Aluminum