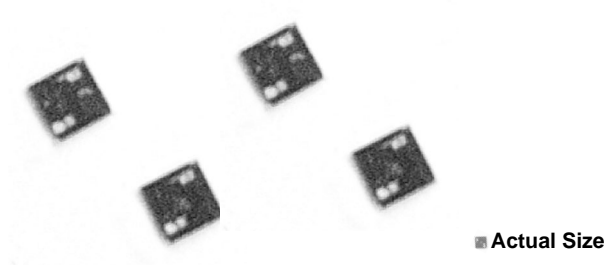


Single Value Chip Resistor



FEATURES

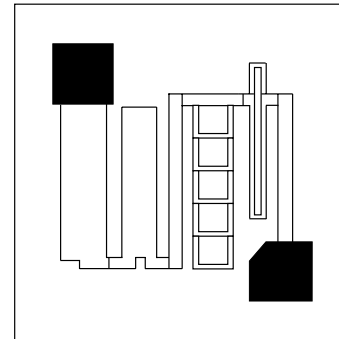
- Small size 20 mil square
- Resistance range 10Ω to 1MΩ
- Resistor material: self-passivating Tantalum nitride
- Silicon substrate for good power dissipation
- Low cost

Thin film resistors are often an excellent solution for analog design problems where space is limited and high packing density is required. Due to their Tantalum Nitride resistive layer these resistors are stable and moisture resistant.

TYPICAL PERFORMANCE

	ABS
TCR	100
TOL	0.5

SCHEMATIC AND PATTERN



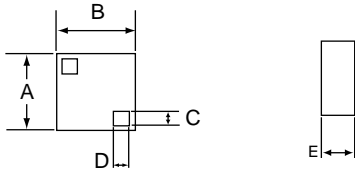
HYBRID

STANDARD ELECTRICAL SPECIFICATIONS

TEST	SPECIFICATIONS	CONDITIONS
MATERIAL	TANTALUM NITRIDE	
Resistance Range	10 ohms to 1M ohms	
Absolute TCR	± 100ppm/°C (± 50ppm/°C on request)	- 55°C to + 125°C
Absolute Tolerance	± 0.5%, ± 1%, ± 2%	
Power Dissipation	100mW at + 25°C, 50mW at + 70°C, 25mW at + 125°C	
Stability	± 0.07% typical, ± 0.1 Max.	2000 hrs. @ + 70°C
Voltage Coefficient	< 0.1ppm/Volt	
Working Voltage	50 Volts DC	
Operating Temperature Range	- 55°C to + 155°C	
Storage Temperature Range	- 55°C to + 155°C	
Noise	< - 35dB typical	MIL-STD 202 method 308
Thermal EMF	< 0.01μV/°C	
Shelf Life Stability	100ppm	1 year @ + 25°C

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 • 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

DIMENSIONS in inches and millimeters



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 Max.

MECHANICAL SPECIFICATIONS	
Resistive Element	Tantalum Nitride
Passivation	Tantalum Pentoxide (Autopassivation)
Substrate Material	Standard Silicon
Bonding Pads	Aluminum

How to Order

Series	Ohmic Value	Absolute Tolerance
TA 22	100K ohms	±0.5%
		± 0.5%
		± 1%
		± 2%