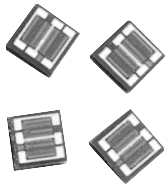
Dual Value Chip Resistor, Center Tap



Actual Size

Chromium silicon thin film is very well suited to produce high density and high ohmic value resistor chips. Performances and sizes are greatly improved compared to Thick Film counterparts. The center tap configuration offers a greater flexibility for hybrid layout design.

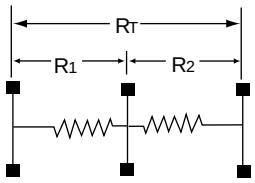
FEATURES

- Center tap feature
- Small size
- Very high ohmic values
- Good stability

TYPICAL PERFORMANCE

◆	ABS	TRACKING
TCR	100	5
	ABS	RATIO
TOL	0.5	0.5

SCHEMATIC



$R_T = R_1 + R_2$ with $R_1 = R_2$ Standard

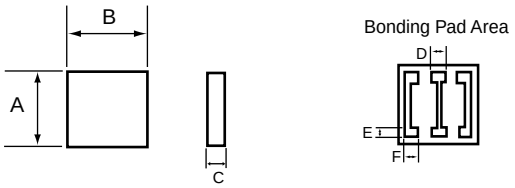
HYBRID

STANDARD ELECTRICAL SPECIFICATIONS

TEST		SPECIFICATIONS	CONDITIONS
MATERIAL		PASSIVATED CHROMIUM SILICON	
Resistance Range		10K ohms to 5M ohms	for $R_T = R_1 + R_2$
TCR:	Tracking	± 5ppm/°C	- 55°C to + 125°C
	Absolute	± 100 ppm/°C (± 50ppm/°C on request)	- 55°C to + 125°C
Tolerance:	Ratio	1/1 standard	
	Absolute	± 0.5%, ± 1%, ± 2%	
	Matching	± 0.5% standard	
Power Rating		250mW at + 25°C, 125mW at + 70°C, 50mW at + 125°C	
Stability		± 0.1% typical, ± 0.2 Max.	2000 hrs. @ + 70°C Under
Voltage Coefficient		0.1ppm/Volt	
Working Voltage		100 Volts DC on R_T	
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		200ppm	1 year @ + 25°C

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DIMENSIONS in inches and millimeters



DIMENSION	INCHES	MILLIMETERS
A	0.03 ± 0.004	0.76 ± 0.10
B	0.03 ± 0.004	0.76 ± 0.10
C	0.01 ± 0.015	0.25 to 0.40
D	0.004	0.10
E	0.006	0.15
F	0.006	0.15

MECHANICAL SPECIFICATIONS	
Resistive Element	Chromium Silicon
Passivation	Silicon Nitride
Substrate Material	Silicon (Consult Vishay for AL_2O_3)
Bonding Pads	Aluminum

HYBRID

How to Order

Series	R_T Ohmic Value	Absolute Tolerance	Matching Tolerance
CS 33	**100K**	**±0.5%**	**0.5%**
	$R_T = R_1 + R_2$	**±0.5%** **±1%** **±2%**	

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