## Vishay Sfernice



# **Dual Value Chip Resistors, 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 30 mil x 30 mil
- Very high ohmic values (up to 5  $M\Omega$ )
- Good stability 0.1 % (2000 h, rated power, at + 70 °C)
- Wirebondable



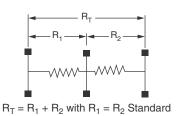
ROHS



#### **TYPICAL PERFORMANCE**

	ABS	TRACKING
TCR	100 ppm/°C	5 ppm/°C
	ABS	RATIO
TOL.	0.5 %	0.5 %

#### **SCHEMATIC**



STANDARD ELECTRICAL SPECIFICATIONS				
TEST		SPECIFICATIONS	CONDITIONS	
MATERIAL		PASSIVATED CHROMIUM SILICON		
Resistance range	е	10 kΩ to 5 MΩ	for $R_T = R_1 + R_2$	
TCR:	Tracking	± 5 ppm/°C	- 55 °C to + 155 °C	
	Absolute	± 100 ppm/°C (± 50 ppm/°C on request)	- 55 °C to + 155 °C	
Ohmic value	Ratio	1/1 standard (unequal values: please consult)		
Tolerance:	Absolute	± 0.5 %, ± 1 %, ± 2 %		
	Matching	± 0.5 % standard		
Power rating		250 mW at + 25 °C, 125 mW at + 70 °C, 50 mW at + 125 °C		
Stability		± 0.1 % typical, ± 0.2 maximum	2000 h at + 70 °C under Pn	
Voltage coefficie	nt	0.1 ppm/V		
Working voltage		100 V <sub>DC</sub> on R <sub>T</sub>		
Operating tempe	erature range	- 55 °C to + 155 °C		
Storage tempera	ture 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	

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

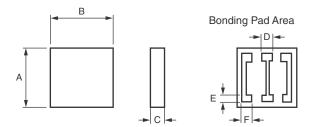




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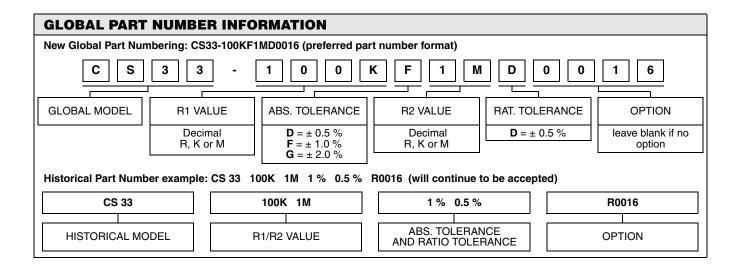
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#### **DIMENSIONS**



DIMENSION	INCHES	MILLIMETERS
A	0.03 ± 0.004	0.76 ± 0.10
В	0.03 ± 0.004	0.76 ± 0.10
С	0.01 ± 0.015	0.25 ± 0.40
D	0.004	0.10
Е	0.006	0.15
F	0.006	0.15

MECHANICAL SPECIFICATIONS		
Resistive element	Chromium Silicon	
Passivation	Silicone Nitride	
Substrate material	Silicon (Consult Vishay for Al <sub>2</sub> O <sub>3</sub> )	
Bonding pads	Aluminum	





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Revision: 18-Jul-08

Document Number: 91000 www.vishay.com