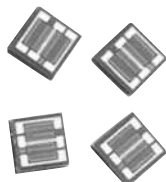


## Dual Value Chip Resistors, Center Tap



Actual Size

These tantalum chips combine excellent stability 0.07 % (2000 h, rated power at + 70 °C) with great power handling capacity. Two bonding pads per termination allow greater flexibility in hybrid layout design.

### FEATURES

- Center tap feature
- Resistor material: self-passivating Tantalum Nitride
- Silicon substrate for good power dissipation
- Low cost
- Wirebondable

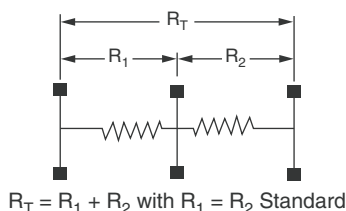


**RoHS**  
COMPLIANT  
**GREEN**  
(5-2008)\*

### TYPICAL PERFORMANCE

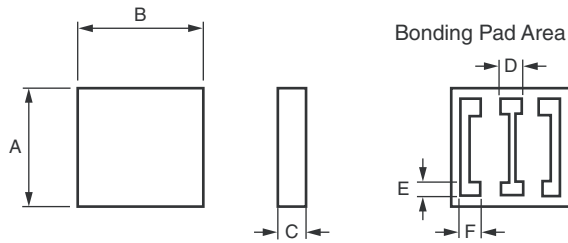
	ABS	TRACKING
TCR	100 ppm/°C	5 ppm/°C
	ABS	RATIO
TOL.	0.5 %	0.5 %

### SCHEMATIC



STANDARD ELECTRICAL SPECIFICATIONS			
TEST		SPECIFICATIONS	CONDITIONS
MATERIAL		TANTALUM NITRIDE	
Resistance range		50 Ω to 1 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 dissipation		250 mW at + 25 °C, 125 mW at + 70 °C, 50 mW at + 125 °C	
Stability		± 0.07 % typical, ± 0.1 maximum	2000 h at + 70 °C under Pn
Working voltage		50 V <sub>DC</sub> on $R_T$	
Operating temperature range		- 55 °C to + 155 °C	
Storage temperature range		- 55 °C to + 155 °C	
Noise		< - 35 dB typical	MIL-STD-202 Method 308
Thermal EMF		0.01 μV/°C	
Shelf life stability		100 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	0.03 ± 0.004	0.76 ± 0.10
B	0.03 ± 0.004	0.76 ± 0.10
C	0.01 ± 0.015	0.25 ± 0.40
D	0.004	0.10
E	0.006	0.15
F	0.006	0.15

**MECHANICAL SPECIFICATIONS**

Resistive element	Tantalum Nitride
Substrate material	Silicon
Passivation	Autopassivation
Bonding pads	Aluminum

**GLOBAL PART NUMBER INFORMATION**

New Global Part Numbering: TA33-5K2F25KD0016 (preferred part number format)

T	A	3	3	-	5	K	2	F	2	5	K	D	0	0	1	6
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GLOBAL MODEL	R1 VALUE Decimal R, K or M	ABS. TOLERANCE D = ± 0.5 % F = ± 1.0 % G = ± 2.0 %	R2 VALUE Decimal R, K or M	RAT. TOLERANCE D = ± 0.5 %	OPTION leave blank if no option
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Historical Part Number example: TA 33 5K2 25K 1 % 0.5 % R0016 (will continue to be accepted)

TA 33	5K2 25K	1 % 0.5 %	R0016
HISTORICAL MODEL	R1/R2 VALUE	ABS. TOLERANCE AND RATIO TOLERANCE	OPTION



## Disclaimer

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