

Dual Value, Chip Resistor Center Tap



Actual Size

These tantalum chips combine excellent stability 0.07 % (2000 hours, 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

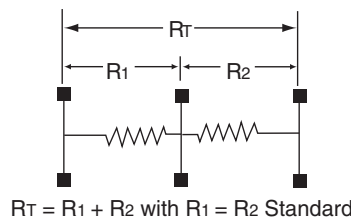


RoHS
COMPLIANT

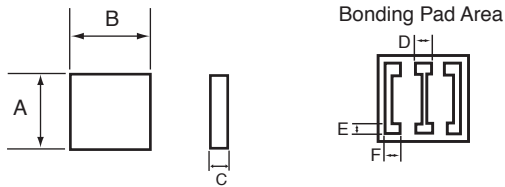
TYPICAL PERFORMANCE

	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 ohms to 500 Kohms	for $R_T = R_1 + R_2$
TCR:	Tracking	± 5 ppm/°C
	Absolute	± 100 ppm/°C (± 50 ppm/°C on Request)
Tolerance:	Ratio	1/1 standard
	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 Max.	2000 hrs. at +70 °C under Pn
Working Voltage	50 Volts DC 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 μ V/°C	
Shelf Life Stability	100 ppm	1 year at + 25 °C

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 to 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	Tantalum Nitride
Substrate Material	Silicon
Passivation	Autopassivation
Bonding Pads	Aluminium

GLOBAL PART NUMBER INFORMATION																																		
New Global Part Numbering: TA33-100KF1MD0016																																		
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">T</td> <td style="text-align: center;">A</td> <td style="text-align: center;">3</td> <td style="text-align: center;">3</td> <td style="text-align: center;">-</td> <td style="text-align: center;">5</td> <td style="text-align: center;">K</td> <td style="text-align: center;">2</td> <td style="text-align: center;">F</td> <td style="text-align: center;">2</td> <td style="text-align: center;">5</td> <td style="text-align: center;">K</td> <td style="text-align: center;">D</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">1</td> <td style="text-align: center;">6</td> </tr> <tr> <td colspan="4" style="text-align: center;">GLOBAL MODEL</td> <td colspan="3" style="text-align: center;">R1 VALUE Decimal R, K or M</td> <td colspan="3" style="text-align: center;">ABS. TOLERANCE D = ± 0.5 % F = ± 1.0 % G = ± 2.0 %</td> <td colspan="2" style="text-align: center;">R2 VALUE Decimal R, K or M</td> <td colspan="2" style="text-align: center;">RAT TOL D = ± 0.5 %</td> <td colspan="2" style="text-align: center;">SPECIAL</td> </tr> </table>	T	A	3	3	-	5	K	2	F	2	5	K	D	0	0	1	6	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 TOL D = ± 0.5 %		SPECIAL		
T	A	3	3	-	5	K	2	F	2	5	K	D	0	0	1	6																		
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 TOL D = ± 0.5 %		SPECIAL																				
Historical Part Number example: TA 33 5K2 25K 1% 0.5% R0016																																		



Notice

Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc., or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.