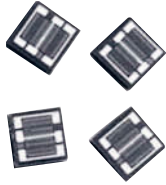


# Wirebondable Dual Value Thin Film Chip Resistor Networks, Center Tap



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.

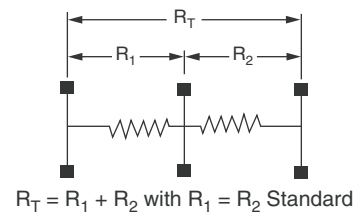
## FEATURES

- Center tap feature
- Resistor material: Self-passivating Tantalum nitride
- Silicon substrate for good power dissipation
- Wirebondable
- Material categorization: For definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



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

## SCHEMATIC



## STANDARD ELECTRICAL SPECIFICATIONS

MODEL	SIZE	RESISTANCE RANGE <sup>(1)</sup> Ω	POWER RATING $P_{70\text{ °C}}$ W	ABSOLUTE TOLERANCE ± %	RATIO TOLERANCE ± %	ABSOLUTE TCR <sup>(2)</sup> ± ppm/°C	RATIO TCR ± ppm/°C
TA 33	0303	50 to 1M	0.125	0.5, 1, 2	0.1, 0.5	50, 100	5

### Notes

<sup>(1)</sup> ( $R_T = R_1 + R_2$ )

<sup>(2)</sup> ± 100 ppm/°C, ± 50 ppm/°C on request at - 55 °C to + 155 °C

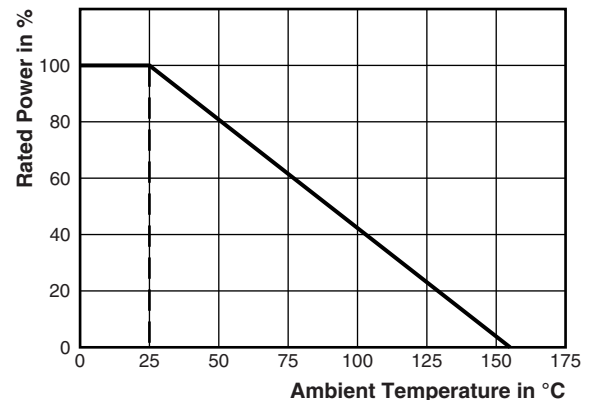
## PERFORMANCES

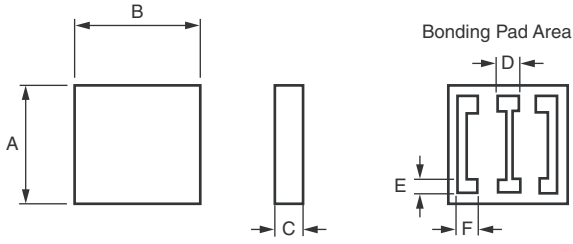
TEST	SPECIFICATIONS	CONDITIONS
Ohmic value: Ratio	1/1 standard (unequal values: please consult)	
Stability	± 0.07 % typical, ± 0.1 maximum	2000 h at + 70 °C under $P_n$
Limiting voltage	50 $V_{DC}$ on $R_T$	
Noise	< - 35 dB typical	MIL-STD-202 method 308
Thermal EMF	0.01 $\mu V/^\circ C$	
Shelf life stability	100 ppm	1 year at + 25 °C

## CLIMATIC SPECIFICATIONS

Operating temperature range	- 55 °C to + 155 °C
Storage temperature range	- 55 °C to + 155 °C

## DERATING



**DIMENSIONS**


DIMENSION	INCHES	MILLIMETERS
A	0.033 ± 0.004	0.855 ± 0.10
B	0.033 ± 0.004	0.855 ± 0.10
C	0.01 to 0.015	0.25 to 0.40
D	0.006	0.15
E	0.004	0.10
F	0.006	0.15

**MECHANICAL SPECIFICATIONS**

Resistive element	Tantalum nitride
Substrate material	Silicon
Passivation	Selfpassivation
Bonding pads	Aluminum, gold on request

**GLOBAL PART NUMBER INFORMATION**

New Global Part Numbering: TA33-5K2F25KD0099 (preferred part number format)

T	A	3	3	-	5	K	2	F	2	5	K	D	0	0	9	9
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GLOBAL MODEL	R <sub>1</sub> VALUE	ABS. TOLERANCE	R <sub>2</sub> VALUE	RAT. TOLERANCE	OPTION
	Decimal R, K, or M	D = ± 0.5 % F = ± 1.0 % G = ± 2.0 %	Decimal R, K, or M	B = ± 0.1 % D = ± 0.5 %	Leave blank if no option



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