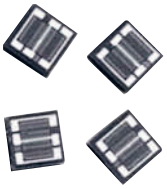
Wirebondable Dual Value Thin Film Chip Resistor Networks, Center Tap



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

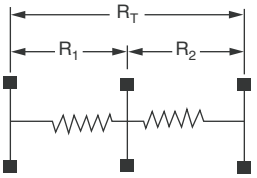
- Center tap feature
- Resistor material: Self-passivating Tantalum nitride
- Silicon substrate for good power dissipation
- Wirebondable
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

GREEN (5-2008)

SCHEMATIC



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

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	SIZE	RESISTANCE RANGE (1) Ω	POWER RATING $P_{70\,°C}$ W	ABSOLUTE TOLERANCE ± %	RATIO TOLERANCE ± %	ABSOLUTE TCR (2) ± 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

(1) ($R_T = R_1 + R_2$)

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

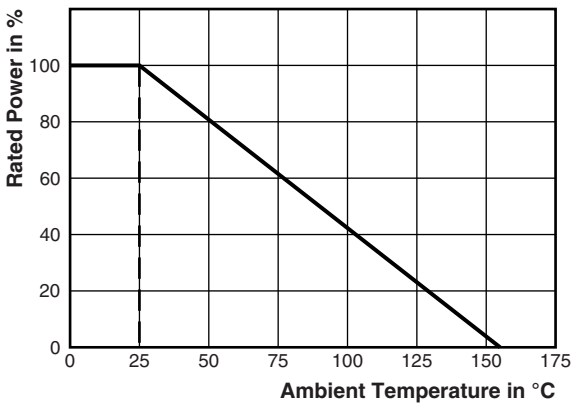
PERFORMANCES

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 Pn
Limiting voltage	50 V_{DC} on R_T	
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

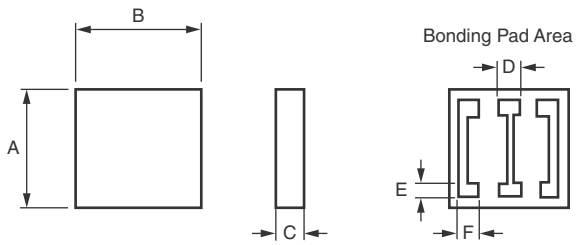
CLIMATIC SPECIFICATIONS

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

GLOBAL MODEL	R_1 VALUE	ABS. TOLERANCE	R_2 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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