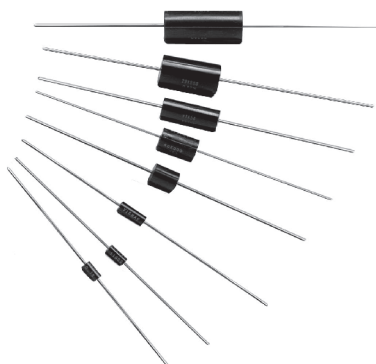


Bulk Metal® Foil Technology Tubular Axial-Lead Resistors

Meet or Exceed MIL-R-39005 Requirements

FEATURES

- Temperature coefficient of resistance (TCR):
±8 ppm/°C (–55°C to +125°C, +25°C Ref.)
±4 ppm/°C (0°C to +60°C)
- Tolerance: to ±0.01%
- Load life stability:
±0.05% at 25°C, 2000 hours at rated power
±0.0025% at 25°C, 2000 hours at low power
- Electrostatic discharge (ESD) up to 25 000 Volts
- Resistance range: 5 Ω to 500 kΩ
- Power rating: 0.2 W to 1.0 W at 70°C
- Any value available within resistance range (e.g., 1K2345)



RoHS*
COMPLIANT

TCR (for values under 50R)

VALUES	0°C to +60°C	–55 to +125°C, +25°C Ref.
25R - 50R	±5 ppm/°C	±8 ppm/°C
15R - 24R999	±6 ppm/°C	±10 ppm/°C
5R - 14R999	±8 ppm/°C	±12 ppm/°C
1R - 4R999	±15 ppm/°C	±20 ppm/°C

Model Selection

VFR MODEL	MIL STYLE	POWER		MAXIMUM WORKING VOLTAGE	RESISTANCE RANGE ⁽¹⁾ (Ω)	TIGHTEST TOLERANCE	TCR RANGE ⁽²⁾
		at +70°C	at +125°C				
VTA56	RBR56	0.25 W	0.125 W	300 V	5 to 24R9 25 to 150K	±0.1% ±0.01%	V4 V3, V2
VTA55	RBR55	0.3 W	0.15 W	300 V	5 to 24R9 25 to 150K	±0.1% ±0.01%	V4V3, V2
VTA54	RBR54	0.5 W	0.25 W	300 V	5 to 24R9 25 to 300K	±0.1% ±0.01%	V4V3, V2
VTA53	RBR53	0.66 W	0.33 W	300 V	5 to 24R9 25 to 300K	±0.1% ±0.01%	V4 V3, V2
VTA52	RBR52	1.0 W	0.5 W	300 V	5 to 24R9 25 to 500K	±0.1% ±0.01%	V4V3, V2
VMTA55	RNC55	0.2 W	0.1 W	200 V	5 to 49R9 50 to 30K	±0.1% ±0.01%	V4V3, V2
VMTB60	RNC60	0.25 W	0.125 W	250 V	5 to 49R9 50 to 60K	±0.1% ±0.01%	V4 V3, V2

Notes

⁽¹⁾ For higher/lower resistance values, consult the Application Engineering Department

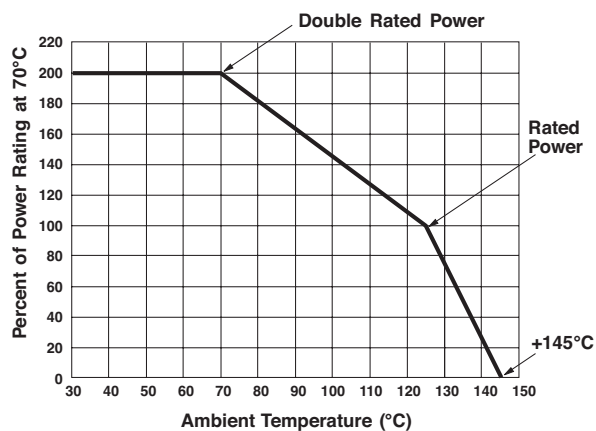
⁽²⁾ TCR options for values >50 Ω

V4 = ±4 ppm/°C (0 to +60°C); ±8 ppm/°C (–55°C to +125°C, +25°C Ref.)

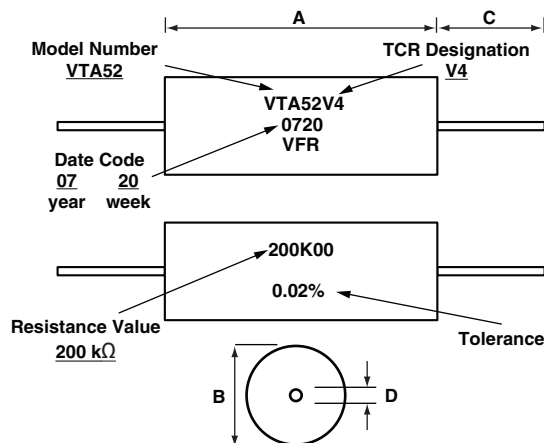
V3 = ±3 ppm/°C (0 to +60°C); ±5 ppm/°C (–55°C to +125°C, +25°C Ref.)

V2 = ±2 ppm/°C (0 to +60°C); ±5 ppm/°C (–55°C to +125°C, +25°C Ref.)

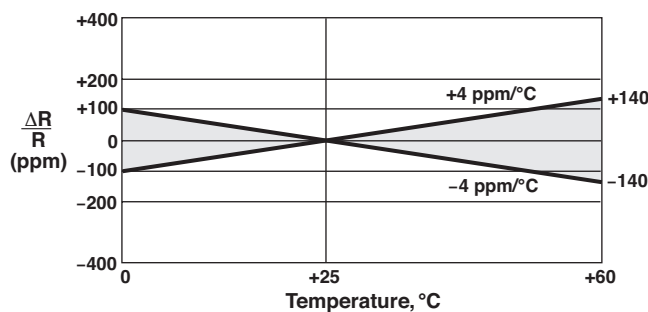
Power Derating Curve



VTA/VMTA Series Standard Printing



Temperature Coefficient of Resistance

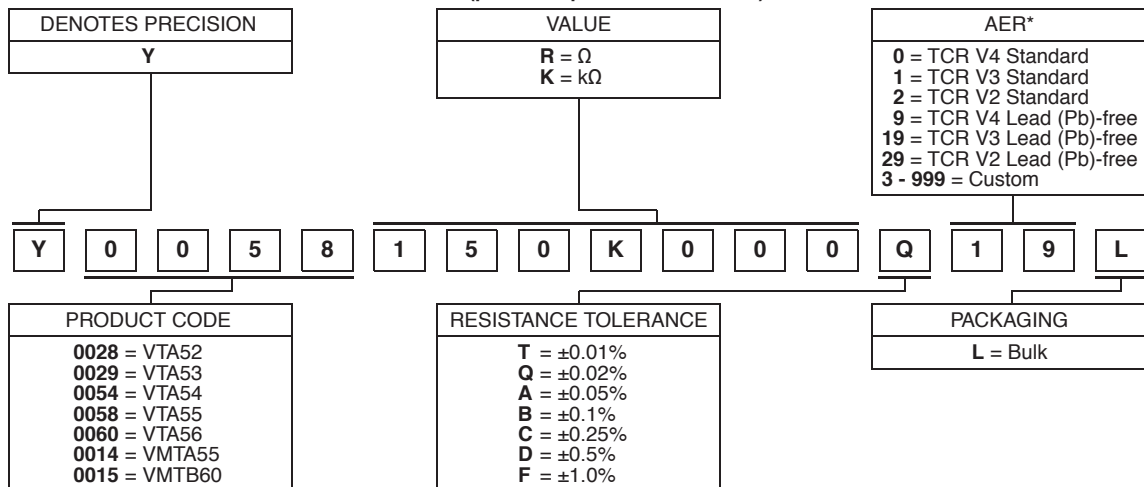


VTA/VMTX Dimensions

VFR MODEL	MIL SIZE	BODY								LEAD			
		LENGTH (A)				DIAMETER (B)				LENGTH (C)		DIAMETER (D)	
		INCH		mm		INCH		mm		INCH	mm	INCH	mm
VTA56	RBR56	0.356	$\frac{+0.005}{-0.010}$	9.04	$\frac{+0.13}{-0.25}$	0.260	$\frac{+0.005}{-0.015}$	6.60	$\frac{+0.13}{-0.38}$	1.5 Minimum	38.10	0.032	0.81
VTA55	RBR55	0.500±0.020		12.70±0.51		0.260	$\frac{+0.005}{-0.010}$	6.60	$\frac{+0.13}{-0.25}$	1.5 Minimum	38.10	0.032	0.81
VTA54	RBR54	0.750	$\frac{+0.020}{-0.032}$	19.05	$\frac{+0.51}{-0.81}$	0.260	$\frac{+0.005}{-0.010}$	6.60	$\frac{+0.13}{-0.25}$	1.5 Minimum	38.10	0.032	0.81
VTA53	RBR53	0.750±0.020		19.05±0.51		0.375	±0.015	9.53	±0.38	1.5 Minimum	38.10	0.032	0.81
VTA52	RBR52	1.000	$\frac{+0.020}{-0.032}$	25.40	$\frac{+0.51}{-0.81}$	0.375	±0.015	9.53	±0.38	1.35 Minimum	34.29	0.032	0.81
VMTA55	RNC55	0.270±0.005		6.86±0.13		0.120	$\frac{+0.005}{-0.010}$	3.05	$\frac{+0.13}{-0.25}$	1.5 Minimum	38.10	0.025	0.64
VMTB60	RNC60	0.375±0.005		9.53±0.13		0.160	±0.005	4.06	±0.13	1.5 Minimum	38.10	0.025	0.64

Global Part Number Information

NEW GLOBAL PART NUMBER: Y0058150K000Q19L (preferred part number format)



FOR EXAMPLE: ABOVE GLOBAL ORDER Y0058 150K000 Q 19 L:

TYPE: VTA55

VALUE: 150.0 k Ω ABSOLUTE TOLERANCE: $\pm 0.02\%$

TCR: V3

TERMINATION: Lead (Pb)-free

PACKAGING: Bulk

HISTORICAL PART NUMBER: VTA55V3T 150K00 Q B (will continue to be used)

VTA55	V3	T	150K00	Q	B
MODEL	TCR	TERMINATION	OHMIC VALUE	RESISTANCE TOLERANCE	PACKAGING
VTA52 VTA53 VTA54 VTA55 VTA56 VMTA55 VMTB60	V4 V3 V2	T = Lead (Pb)-free None = Tin/Lead alloy	150K00 = 150.0 k Ω	T = $\pm 0.01\%$ Q = $\pm 0.02\%$ A = $\pm 0.05\%$ B = $\pm 0.1\%$ C = $\pm 0.25\%$ D = $\pm 0.5\%$ F = $\pm 1.0\%$	B = Bulk

Note

* For non-standard requests, please contact application engineering.