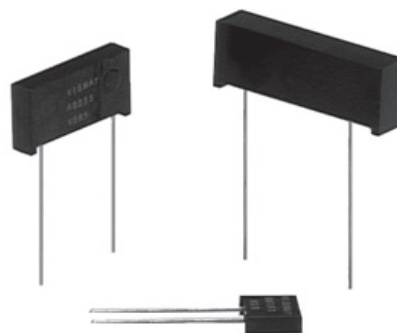


Bulk Metal® Foil Technology Industrial Precision Resistors

with TCR of ± 4 ppm/°C and Tolerance of $\pm 0.01\%$

FEATURES

- Temperature coefficient of resistance (TCR):
 ± 4 ppm/°C (0°C to +60°C)
 ± 8 ppm/°C (–55°C to +125°C, +25°C ref.)
- Resistance range: 0.5 Ω to 1 M Ω
- VFR resistors are not restricted to standard values, we can supply specific “as required” values (e.g., 1K2345 vs. 1K)
- Tolerance: to $\pm 0.01\%$ (100 ppm)
- Load life stability: to $\pm 0.005\%$ at 70°C, 2000 h at rated power
- Electrostatic discharge up to 25 000 V



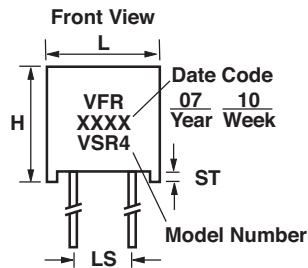
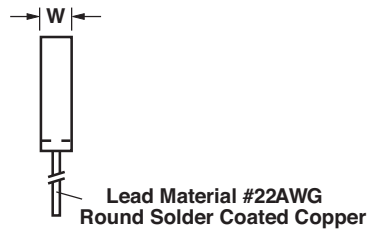
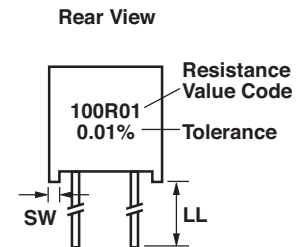
Pb-free
Available
RoHS*
COMPLIANT

Model Selection															
MODEL NUMBER	RESISTANCE (Ω)	POWER at +70°C	POWER at +125°C	MAXIMUM WORKING VOLTAGE	DIMENSIONS		LOAD LIFE STABILITY (MAXIMUM ΔR)	MAXIMUM TEMPERATURE COEFFICIENT OF RESISTANCE (+25°C REF.)	TIGHTEST TOLERANCE % VS. LOWEST RESISTANCE VALUE (Ω)						
					INCHES	mm									
VSR	1 to 150K	0.3 W	0.2 W	300	W: 0.105±0.010 L: 0.300±0.010 H: 0.326±0.010	2.67±0.25 7.62±0.25 8.28±0.25	0.05 % 2000 hours at +125°C	0°C to +60°C ±4 ppm/°C	±0.01/50 ±0.02/30 ±0.05/5 ±0.1/2 ±0.5/1						
VSRJ ⁽¹⁾		up to 100 K			ST: 0.010 minimum SW: 0.040±0.005 LL: 1.000±0.125 LS: 0.150±0.005 ⁽¹⁾	0.254 minimum 1.02±0.13 25.4±3.18 3.81±0.13									
		0.25 W	0.15 W												
		over 100 K													
VSR4	1 to 500K	0.5 W	0.4 W	350	W: 0.160 maximum L: 0.575 maximum H: 0.413 maximum	4.06 maximum 14.61 maximum 10.49 maximum			0.05 % 2000 hours at +125°C	0°C to +60°C ±4 ppm/°C	±0.005/100 ±0.01/50 ±0.02/30 ±0.05/5 ±0.1/2 ±0.5/1				
		up to 200 K			ST: 0.035±0.005 SW: 0.050±0.005 LL: 1.000±0.125 LS: 0.400±0.020	0.89±0.13 1.27±0.13 25.4±3.18 10.16±0.51									
		0.25 W	0.2 W												
		over 200 K													
VSR5	1 to 750K	0.75 W	0.6 W	350	W: 0.160 maximum L: 0.820 maximum H: 0.413 maximum	4.06 maximum 20.83 maximum 10.49 maximum		0.05 % 2000 hours at +125°C				-55°C to +125°C ±8 ppm/°C	±0.005/100 ±0.01/50 ±0.02/30 ±0.05/5 ±0.1/2 ±0.5/1		
		up to 300 K			ST: 0.035±0.005 SW: 0.050±0.005 LL: 1.000±0.125 LS: 0.650±0.020	0.89±0.13 1.27±0.13 25.4±3.18 16.51±0.51									
		0.4 W	0.3 W												
		over 300 K													
VSR6	0.5 to 1M	1.0 W	0.8 W	500	W: 0.260 maximum L: 1.200 maximum H: 0.413 maximum	6.60 maximum 30.48 maximum 10.49 maximum				0.05 % 2000 hours at +125°C				-55°C to +125°C ±8 ppm/°C	±0.005/100 ±0.01/50 ±0.02/30 ±0.05/5 ±0.1/2 ±0.5/1
		up to 400 K			ST: 0.035±0.005 SW: 0.050±0.005 LL: 1.000±0.125 LS: 0.900±0.020	0.89±0.13 1.27±0.13 25.4±3.18 22.86±0.51									
		0.5 W	0.4 W												
		over 400 K													

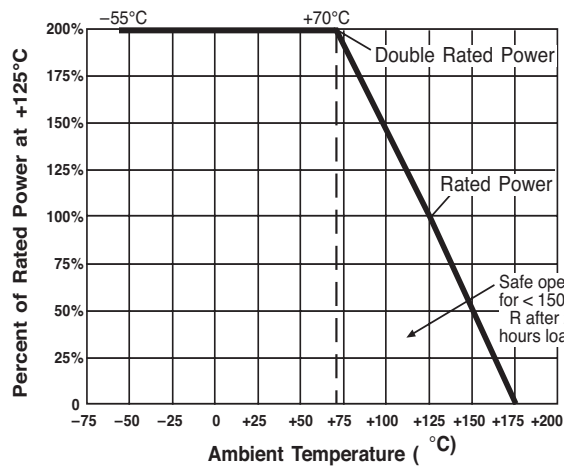
Note

⁽¹⁾ 0.200 in (5.08 mm) lead spacing available – specify VSRJ.

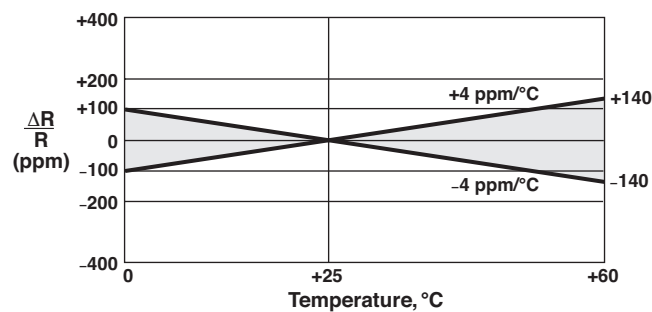
Imprinting and Dimensions



Power Derating Curve

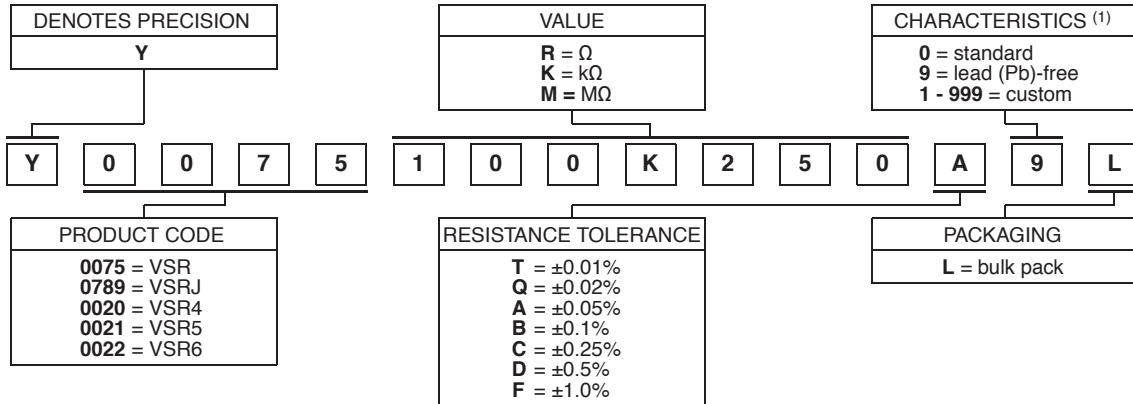


Temperature Coefficient of Resistance



Global Part Number Information

NEW GLOBAL PART NUMBER: Y0075100K250A9L (preferred part number format)



FOR EXAMPLE: ABOVE GLOBAL ORDER Y0075 100K250 A 9 L:

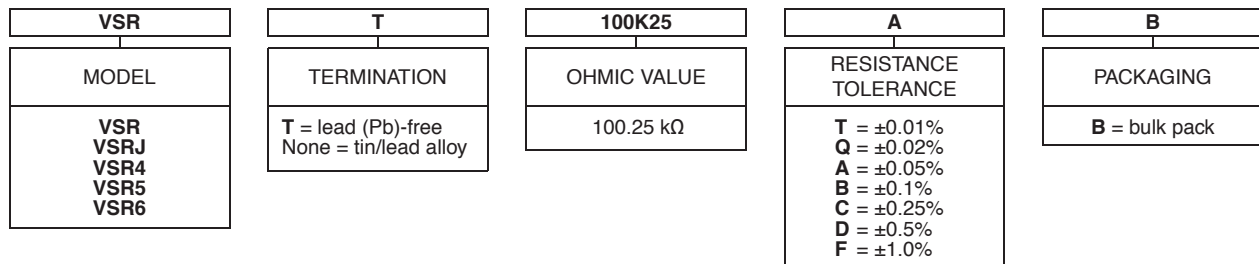
TYPE: VSR

VALUE: 100.25 k Ω ABSOLUTE TOLERANCE: $\pm 0.05\%$

TERMINATION: lead (Pb)-free

PACKAGING: bulk pack

HISTORICAL PART NUMBER EXAMPLE: VSRT 100K25 A B (will continue to be used)



Note

⁽¹⁾ For non-standard requests, please contact application engineering.