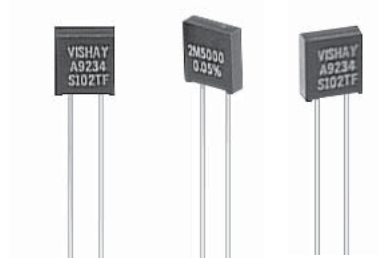


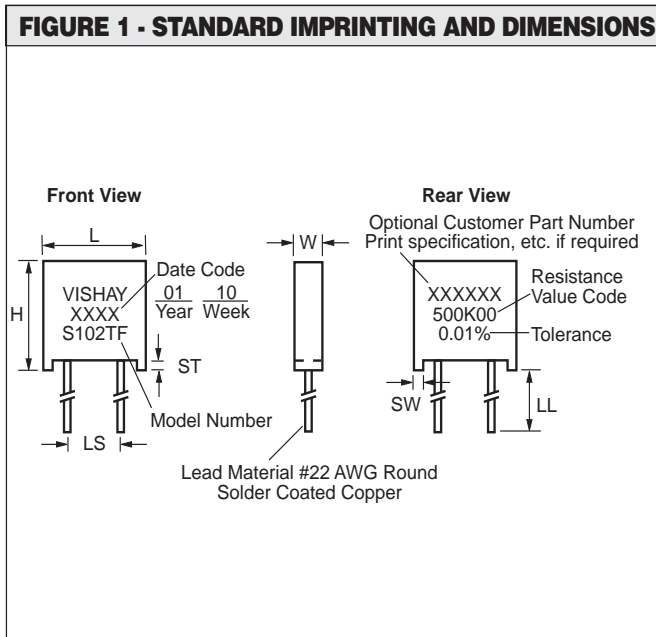


Bulk Metal[®] Foil Technology Thin Film Resistors Available to 7 Megohm



Product may not be to scale

Model S102TF resistors incorporate state-of-the-art thin film elements into the Vishay S102 form factor, thereby extending the existing range capability



FEATURES

- Resistance Range: 150KΩ to 7MΩ
- Resistance Tolerance: ± 0.02% tightest; ± 1% loosest
- Temperature Coefficient of Resistance: ± 15ppm/°C (– 55°C to + 125°C)
- Power Rating: 0.5 watts @ + 70°C
- Load Life: ± 0.05% ΔR maximum (2,000 hrs. @ + 125°C)

	MIL-PRF-55182 CHARACTERISTIC J	S102TF MAXIMUM ΔR
Test Group I		
Thermal Shock	± 0.2%	± 0.01%
Overload	± 0.2%	± 0.01%
Test Group II		
Resistance Temperature Characteristic	± 25ppm/°C	+ 15ppm/°C
Low Temperature Storage	± 0.15%	± 0.02%
Low Temperature Operation	± 0.15%	± 0.01%
Terminal Strength	± 0.2%	± 0.01%
Test Group III		
DWV (Dielectric Withstanding Voltage)	± 0.15%	± 0.05%
Resistance to Solder Heat	± 0.1%	± 0.01%
Moisture Resistance	± 0.4%	± 0.3
Test Group IV		
Shock	± 0.2%	± 0.01%
Vibration	± 0.2%	± 0.01%
Test Group V		
Life Test @ 0.3 W/+ 125°C		
2,000 Hours	± 0.5%	± 0.05%
10,000 Hours	± 2.0%	± 0.1%
Test Group VI		
High Temperature Exposure	± 2.0%	± 0.5%
Test Group VII		
Voltage Coefficient	0.005%/V	< 0.0001%/V

Shaded areas indicate ΔRs greater than foil.

MODEL NUMBER	RESISTANCE RANGE (Ω)	RESISTANCE TOLERANCE	MAX WORKING VOLTAGE	POWER RATING @ + 70°C*	DIMENSIONS		
					INCHES	mm	
S102TF	150K to < 1M 1M to 7M	± 0.02% to ± 1% ± 0.05% to ± 1%	300	0.5 W	W	0.105 ± 0.010	2.67 ± 0.25
					L	0.300 ± 0.010	7.62 ± 0.25
					H	0.326 ± 0.010	8.28 ± 0.25
					ST	0.015 ± 0.005	0.381 ± 0.13
					LL	1.000 ± 0.125	25.40 ± 3.18
					LS	0.150 ± 0.005	3.81 ± 0.13
					SW	0.040 ± 0.005	1.02 ± 0.13

*Derated linearly to 0.3 Watts at +125°C.

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THROUGH HOLE