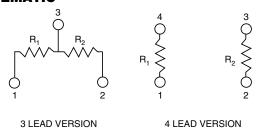


Molded, SC-70 Thin Film Resistor, Surface Mount Network



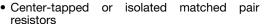
Vishay Dale Thin Film MP Series Dividers provide $\pm~2~\text{ppm}/^\circ\text{C}$ tracking and a ratio tolerance as tight as $\pm~0.05~\%$, ultra small size, 3 or 4 lead package and exceptional stability for all surface mount applications. The standard SC-70 package format with common standard resistance values provide easy selection for most applications requiring matched pair resistor elements. If you require a non-standard ratio, consult the applications engineering group as we may be able to meet your requirements.

SCHEMATIC



FEATURES

- Small physical size EIAJ SC70 format
- Tight resistance ratio tolerances ± 0.05 %
- Low TCR tracking ± 2 ppm
- Excellent long term ratio stability $(\Delta R \pm 0.015 \% \text{ at } 70 \text{ °C for } 2000 \text{ h})$





 Material categorization: for definitions of compliance please see www.vishav.com/doc?99912

Note

* This datasheet provides information about parts that are RoHS-compliant and / or parts that are non RoHS-compliant. For example, parts with lead (Pb) terminations are not RoHS-compliant. Please see the information / tables in this datasheet for details

TYPICAL PERFORMANCE

	ABSOLUTE	TRACKING
TCR	25	2
	ABSOLUTE	RATIO
TOL.	0.1	0.05

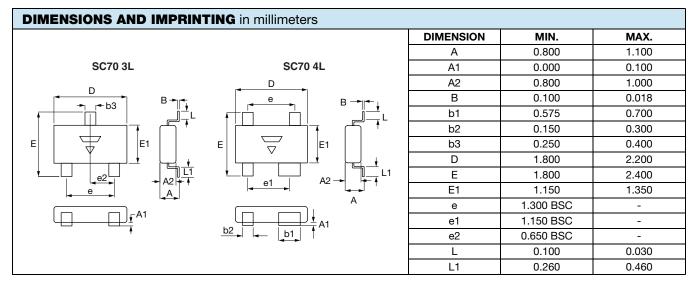
STANDARD RESISTANCE VALUES				
TYPE	STANDARD VALUES			
	R ₁ (Ω)	R ₂ (Ω)		
MP3	500	500		
	1K	1K		
	10K	10K		
MP4	1K	1K		
	10K	10K		
	50K	50K		

TEST	SPECIFICATIONS	CONDITIONS
Material	Passivated nichrome	-
Pin/Lead Number	3, 4	-
Resistance Range	100 Ω to 50 k Ω per resistor	-
TCR: Absolute	± 25 ppm/°C	-55 °C to +125 °C
TCR: Tracking	± 2 ppm/°C (typical)	-55 °C to +125 °C
Tolerance: Absolute	± 0.10 % to ± 1.0 %	+25 °C
Tolerance: Ratio	± 0.05 % (standard), ± 1.0 %	-
Power Rating: Resistor	0.075 W	Maximum at +70 °C
Power Rating: Package	0.150 W	Maximum at +70 °C
Stability: Absolute	ΔR ± 0.05 %	2000 h at +70 °C
Stability: Ratio	ΔR ± 0.015 %	2000 h at +70 °C
Voltage Coefficient	0.1 ppm/V	-
Working Voltage	100 V max. not to exceed √P x R	-
Operating Temperature Range	-55 °C to +125 °C	-
Storage Temperature Range	-55 °C to +150 °C	-
Noise	< -30 dB	-
Thermal EMF	0.1 μV/°C	-
Shelf Life Stability: Absolute	ΔR ± 0.01 %	1 year at +25 °C
Shelf Life Stability: Ratio	ΔR ± 0.002 %	1 year at +25 °C

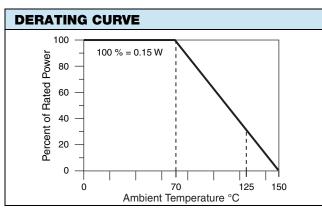
Revision: 28-Aug-2020 1 Document Number: 60092

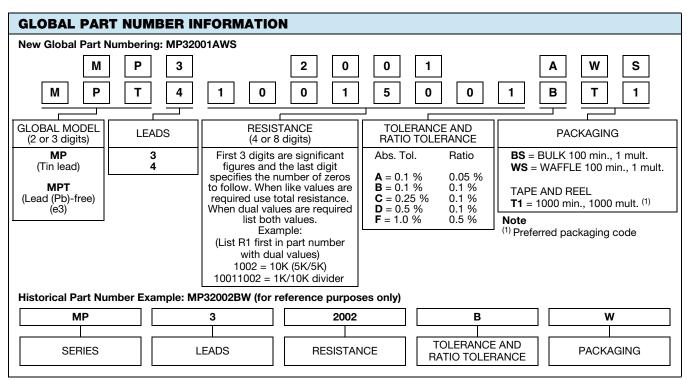


Vishay Dale Thin Film



MECHANICAL SPECIFICATIONS		
Resistive Element	Passivated nichrome	
Substrate Material	Silicon	
Body	Molded epoxy	
Terminals	Copper alloy	
Lead (Pb)-free Option	100 % matte tin	
Tin Lead Option	Sn85	
Tin Lead and Lead (Pb)-free Finish	Plated	







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Vishay

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