Vishay Dale Thin Film

## Lead (Pb)-Free Thick Film, Wraparound Low Value Resistor ( $R = 0.25 \Omega$ )



- Metal glaze on high quality ceramic
- Protective overglaze
- Lead (Pb)-free solder contact on Ni barrier layer
- Pure tin plating provides compatibility with lead (Pb)-free and lead containing soldering processes e3
- Material categorization: For definitions of compliance please see <u>www.vishay.com/doc?99912</u>

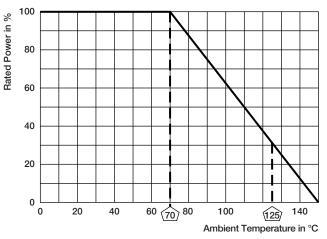
STANDARD ELECTRICAL SPECIFICATIONS								
MODEL	CASE SIZE INCH	CASE SIZE METRIC	POWER RATING <sup>(1)</sup> P <sub>70</sub> W	LIMITING ELEMENT VOLTAGE MAX. V≅	TEMPERATURE COEFFICIENT ± ppm/°C	TOLERANCE ± %	RESISTANCE VALUE Ω	
LR	2512	6332	2.0	$\sqrt{P \times R}$	300	1	0.25	

#### Note

<sup>(1)</sup> CECC 40401-802/EIA-575

TECHNICAL SPECIFICATIONS					
PARAMETER	UNIT	2512			
Power rating	W	2.0			
Limiting element voltage	V	$\sqrt{P \times R}$			
Insulation voltage (1 min)	V <sub>peak</sub>	> 300			
Thermal resistance	K/W	≤ 45			
Insulation resistance	Ω	> 10 <sup>9</sup>			
Temperature range	°C	- 55 to + 125			
Weight/1000 pieces	g	40.5			

## DERATING

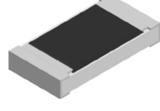


PERFORMANCE				
TEST	CONDITIONS OF TEST	REQUIREMENTS <sup>(2)</sup>		
Endurance test at 70 °C IEC 60115-1, 4.25.1	1000 h at 70 °C, 1.5 h "ON", 0.5 h "OFF"	$\leq \pm 2 \%$		
Endurance at UCT IEC 60115-1, 4.25.3	1000 h at 125 °C without load	$\leq \pm 0.5$ %		
Overload test IEC 60115-1, 4.13	Short time overload for 2 s	≤±1 %		
Thermal shock IEC 60115-1, 4.19; IEC 60068-2-14	Rapid change between upper and lower category temperature	≤±1 %		
Damp heat steady state IEC 60115-1, 4.24; IEC 60068-2-3	56 days at 40 °C and 93 % relative humidity	$\leq \pm 2 \%$		
Resistance to soldering heat IEC 60115-1, 4.18; IEC 60068-2-20	10 s at 260 °C solder bath temperature	≤ ± 1 %		

#### Note

<sup>(2)</sup> Limits for change of resistance at test.

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e3

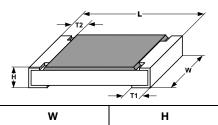




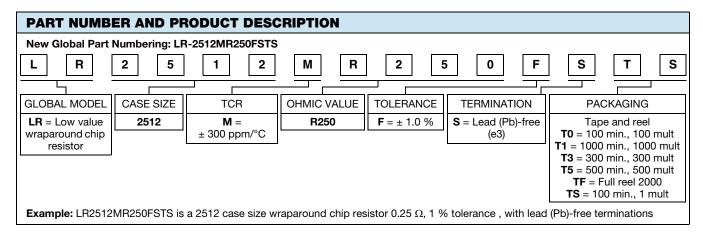
www.vishay.com

LR

### **DIMENSIONS** in inches (millimeters)



_ <b>→/</b> T1/ <del>4</del> -							
CASE SIZE	L	W	Н	T1	T2		
2512	0.248 ± 0.008 (6.3 ± 0.2)	0.124 ± 0.006 (3.15 ± 0.15)	0.024 ± 0.004 (0.6 ± 0.1)	$\begin{array}{c} 0.024 \pm 0.008 \\ (0.6 \pm 0.2) \end{array}$	0.024 ± 0.008 (0.6 ± 0.2)		





Vishay

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