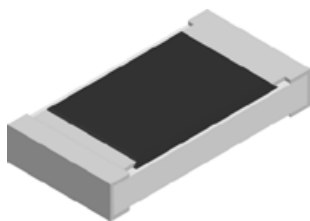


## Lead (Pb)-Free Thick Film, Wraparound Low Value Resistor (R = 0.25 Ω)



### FEATURES

- 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 [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



Available



### STANDARD ELECTRICAL SPECIFICATIONS

MODEL	CASE SIZE INCH	CASE SIZE METRIC	POWER RATING <sup>(1)</sup> $P_{70}$ W	LIMITING ELEMENT VOLTAGE MAX. $V_{\leq}$	TEMPERATURE COEFFICIENT $\pm$ ppm/°C	TOLERANCE $\pm$ %	RESISTANCE VALUE $\Omega$
LR	2512	6332	2.0	$\sqrt{P \times R}$	300	1	0.25

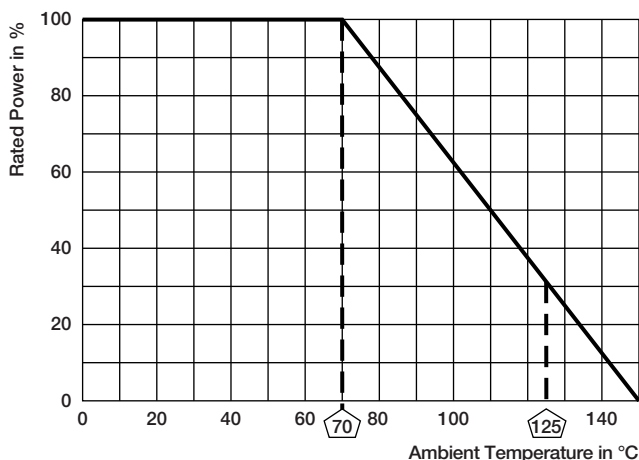
#### Note

<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)	$V_{peak}$	> 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

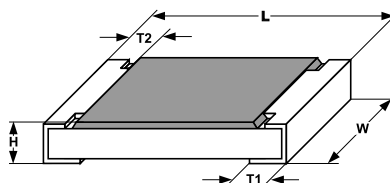


### PERFORMANCE

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"	≤ ± 2 %
Endurance at UCT IEC 60115-1, 4.25.3	1000 h at 125 °C without load	≤ ± 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	≤ ± 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.

**DIMENSIONS** in inches (millimeters)


CASE SIZE	L	W	H	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)	0.024 ± 0.008 (0.6 ± 0.2)	0.024 ± 0.008 (0.6 ± 0.2)

**PART NUMBER AND PRODUCT DESCRIPTION**

New Global Part Numbering: LR-2512MR250FSTS

L	R	2	5	1	2	M	R	2	5	0	F	S	T	S
GLOBAL MODEL	CASE SIZE	TCR	OHMIC VALUE	TOLERANCE	TERMINATION	PACKAGING								
LR = Low value wraparound chip resistor	2512	M = ± 300 ppm/°C	R250	F = ± 1.0 %	S = Lead (Pb)-free (e3)	Tape and reel <b>T0</b> = 100 min., 100 mult <b>T1</b> = 1000 min., 1000 mult <b>T3</b> = 300 min., 300 mult <b>T5</b> = 500 min., 500 mult <b>TF</b> = Full reel 2000 <b>TS</b> = 100 min., 1 mult								

**Example:** LR2512MR250FSTS is a 2512 case size wraparound chip resistor 0.25 Ω, 1 % tolerance , with lead (Pb)-free terminations



## Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Vishay products are not designed for use in life-saving or life-sustaining applications or any application in which the failure of the Vishay product could result in personal injury or death unless specifically qualified in writing by Vishay. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.