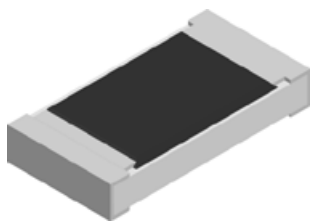


## Lead (Pb)-Free Thick Film, Wraparound Low Value Resistor (R = 0.25 Ω)



### 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

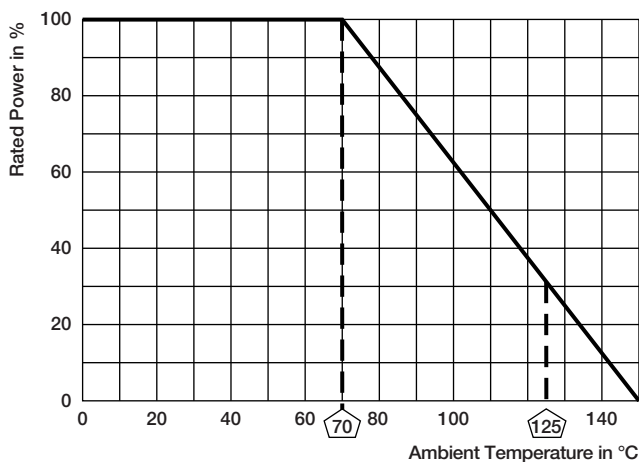
#### Note

<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	$\Omega$	> 10 <sup>9</sup>
Temperature range	°C	- 55 to + 125
Weight/1000 pieces	g	40.5

### DERATING

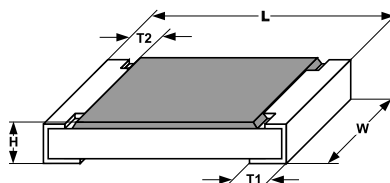


### PERFORMANCE

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



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