Vishay Draloric



Carbon Film, Cylindrical, Fusible Resistors



FEATURES



- Fusible resistor for constant voltage designed for overload protection
- Specially spiralled to provide the fusible function
- Flame retardant coating
- Used in battery chargers, TV-sets, cordless phones, PC/CPU-cooler
- Pure tin termination on nickel barrier, plated on press fit steel caps
- Compatible with lead (Pb)-free and lead containing soldering processes
- Lead (Pb)-free and RoHS compliant

STANDARD ELECTRICAL SPECIFICATIONS						
MODEL	POWER RATING ¹⁾ P ₇₀ W	TEMPERATURE COEFFICIENT ppm/K	TOLERANCE %	$\mathop{\hbox{RESISTANCE RANGE}}_{\Omega}$	E-SERIES	
LCM0207SI	0.25	+ 300/- 250	± 5	R22 - 1K0	24	

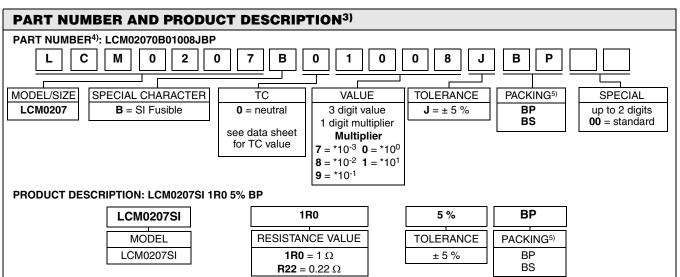
Note

- Permissible dissipation depends on the maximum temperature at the solder point, the component placement density and the substrate material.
- Marking: According to IEC 60062; see also datasheet "surface mount resistor marking" (document number: 20020)

PARAMETER	UNIT	LCM0207SI		
Rated Dissipation at 70 °C	W	0.25		
Minimum Overload to Fuse	W	> 1R0 < 1R0	4 5	
Time to Fuse (max)	s	15		
Thermal Resistance ²⁾	K/W	≤ 220		
Voltage Coefficient	V-1	≥ 10 ⁷		
Category Temperature Range	°C	- 55 to + 125		
Failure Rate	10 ⁻⁹ /h	< 30		
Weight/1000 pcs	g	71		

Note

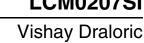
2. Based on measurements on test board acc. to EN 140400.



Note

- 3. Products can be ordered using either the PRODUCT DESCRIPTION or the PART NUMBER.
- 4. The PART NUMBER is shown to facilitate the introduction of a unified part numbering system. Currently, this PART NUMBER is applicable in the Americas only.
- Please refer to table PACKING, see below.

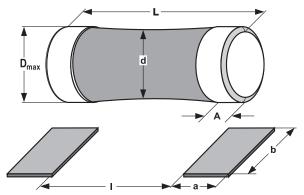
Document Number: 20002 Revision: 15-Feb-06





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Dimensions



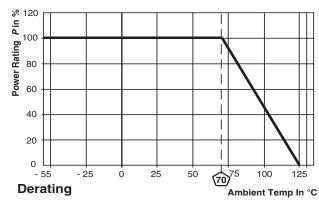
MODEL	DIMENSIONS [in millimeters]					
MODEL	D _{max}	d*	L	A max	A _{min}	
LCM0207SI	2.2	D - 0.4	5.8- 0.3	1.2	0.6	

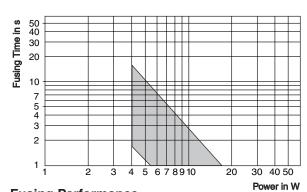
^{*} d measured in the middle of the resistor

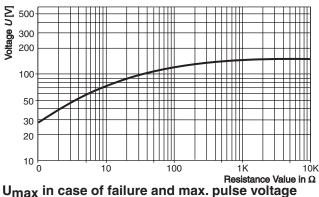
	SOLDER PAD DIMENSIONS [in millimeters]							
MODEL	REFLO	W SOL	DERING	WAVE SOLDERING				
	а	b	I	а	b	I		
LCM0207SI	1.8	2.5	2.9	2.4	2.5	2.8		

PACKING					
MODEL	BLISTER TAPE ON REEL ACC. IEC 60286-3				
	DIAMETER	PIECES/REEL	CODE		
LCM0207SI	180 mm/7"	1500	BP		
	330 mm/13"	7500	BS		

Further information about PACKING see also datasheet "surface mount resistor packing" (document number: 20014).







Fusing Performance

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LCM0207SI

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Metal Film Cylindrical Resistors



PERFORMANCE					
TEST	CONDITIONS OF TEST	REQUIREMENTS			
Endurance Test at 70 °C IEC 60115-1, 4.25.1	1000 hours at 70 °C, 1.5 hours "ON", 0.5 hours "OFF"	≤ 2 %			
Endurance at UCT IEC 60115-1, 4.25.3	1000 hours at 125 °C without load	≤ 2 %			
Thermal Shock IEC 60115-1, 4.19 and IEC 60068-2-14	Rapid change between upper and lower category temperature, 5 cycles	≤ 0.5 %			
Damp Heat Steady State IEC 60115-1, 4.24 and IEC 60068-2-78	56 days at 40 °C and 93 % relative humidity	≤ 2 %			
Resistance to Soldering Heat IEC 60115-1, 4.18 and IEC 60068-2-58	10 seconds at 260 °C solder bath temperature	≤ 0.25 %			

SOLDERING INFORMATION

- For reflow soldering only
- Board has to be thoroughly cleaned after soldering. All flux materials must be completely removed

APPLICABLE SPECIFICATION

• EN 60115-1

www.vishay.com

For technical questions contact: ff3bresistors@vishay.com

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