



THICK FILM CHIP RESISTORS

RCL e3



Long Side Termination Thick Film Chip Resistors

KEY BENEFITS

- Higher power dissipation due to wider terminals
- Better withstand ability in temperature cycle test
- Compliant to RoHS directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition
- AEC-Q200, rev. C compliant

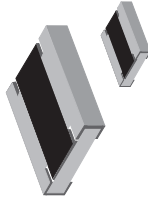
APPLICATIONS

- All general purpose applications
- Densely populated PCBs
- Automotive electronic circuits
- Industrial equipment
- Telecom infrastructure

Long Side Termination Thick Film Chip Resistors

FEATURES

- Enhanced power rating
- Long side terminations
- Protective overglaze
- Pure tin solder contacts on Ni barrier layer, provides compatibility with lead (Pb)-free and lead containing soldering processes
- Compliant to RoHS directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition
- AEC-Q200, rev. C compliant



MODEL	SIZE		POWER RATING P_{70} W	LIMITING ELEMENT VOLTAGE MAX. V	TEMPERATURE COEFFICIENT ppm/K	TOLERANCE %	RESISTANCE RANGE Ω	E-SERIES
	INCH	METRIC						
RCL0612 e3	0612	RR1632	0.5	75	± 100 ± 200	± 1 ± 5	1 to 1M	E24 + E96 E24
RCL1218 e3	1218	RR3246	1.0	200	± 100 ± 200	± 1 ± 5	1 to 2M2	E24 + E96 E24

Notes

- These resistors do not feature a limited lifetime when operated within the permissible limits. However, resistance value drift increasing over operating time may result in exceeding a limit acceptable to the specific application, thereby establishing a functional lifetime
- Marking: See data sheet "Surface Mount Resistor Marking" (document number 20020)
- Power rating depends on the max. temperature at the solder point, the component placement density and the substrate material

PARAMETER	UNIT	RCL0612	RCL1218
Rated Dissipation P_{70} (1)	W	0.5	1.0
Limiting Element Voltage $U_{max, AC/DC}$	V	75	200
Insulation Voltage U_{ins} (1 min)	V	> 100	> 200
Insulation Resistance	Ω	> 10^9	
Category Temperature Range	$^{\circ}\text{C}$	- 55 to + 155	
Weight	mg	11	29.5

Note

(1) The power dissipation on the resistors generates a temperature rise against the local ambient, depending on the heat flow support of the printed-circuit board (thermal resistance). The rated dissipation applies only if the permitted film temperature of 155 $^{\circ}\text{C}$ is not exceeded.

PART NUMBER AND PRODUCT DESCRIPTION															
PART NUMBER: RCL061210K0FKEA(1)															
R	C	L	0	6	1	2	1	0	K	0	F	K	E	A	
MODEL/SIZE		VALUE		TOLERANCE		TCR		PACKAGING (2)		SPECIAL					
RCL0612		R = Decimal K = Thousand M = Million 0000 = Jumper		F $\pm 1\%$ J $\pm 5\%$ Z = Jumper		K ± 100 ppm/K N ± 200 ppm/K 0 = Jumper		EA EB EC EK		Up to 2 digits					
RCL1218															
PRODUCT DESCRIPTION: RCL0612 10K 1 % 100 ET1 e3															
RCL0612		10K		1 %		100		ET1		e3					
RCL0612		RESISTANCE VALUE		TOLERANCE		TCR		PACKAGING (2)		LEAD (Pb)-FREE					
RCL1218		10R = 10 Ω 10K = 10 k Ω 1M = 1 M Ω 0R0 = Jumper		$\pm 1\%$ $\pm 5\%$		± 100 ppm/K ± 200 ppm/K		ET1 ET5 ET6 ET9		e3 = Pure tin termination finish					

Notes

- (1) Preferred way for ordering products is by use of the PART NUMBER
- (2) Please refer to table PACKAGING, see below

PACKAGING									
MODEL	TAPE WIDTH	DIAMETER	PITCH	PIECES/ REEL	REEL		PACKAGING CODE		PRODUCT DESC.
					PAPER	BLISTER	PAPER	BLISTER	
RCL0612	8 mm	180 mm/7"	4 mm	5000	EA	ET1	PAPER	ET1	BLISTER
RCL1218	12 mm	285 mm/11.25"	4 mm	10 000	EB	ET5	PAPER	ET5	BLISTER
		330 mm/13"	4 mm	20 000	EC	ET6	PAPER	ET6	BLISTER
		180 mm/7"	4 mm	4000	EK	ET9	PAPER	ET9	BLISTER

DIMENSIONS in millimeters



Revision 04-Mar-10

SIZE	DIMENSIONS				SOLDER PAD DIMENSIONS				
	INCH	METRIC	L	W	H	T1	T2	REFLOW SOLDERING	WAVE SOLDERING
0612	1632	1.6 ± 0.2	3.2 ± 0.2	0.55 ± 0.1	0.35 ± 0.15	0.25 ± 0.15	0.6	a	b
1218	3246	+0.10 -0.20	4.6 ± 0.15	0.55 ± 0.05	0.45 ± 0.2	0.4 ± 0.2	1.1	a	b
								i	i
								1.0	1.0
								1.9	1.25
								4.8	4.8
								1.9	1.25
								4.8	4.8

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For technical questions, contact thickfilmchip@vishay.com