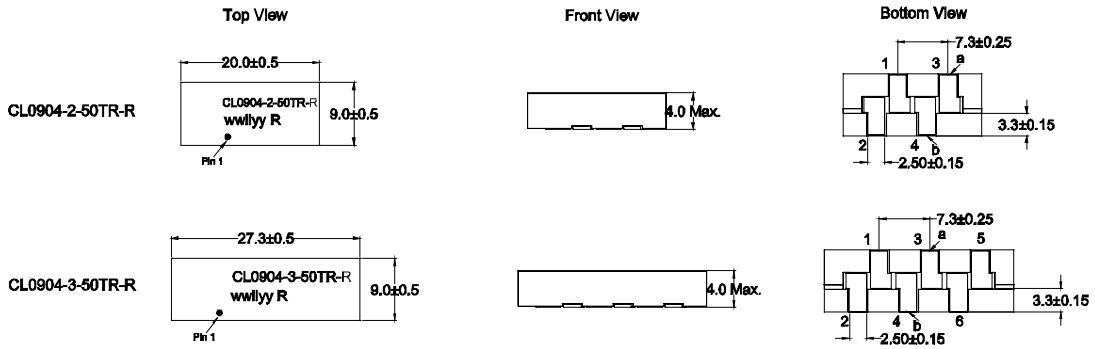
Specifications										
Functional						Test				
Part Number[4]	Inductor Phases	DCR (mΩ) ±10% @20°C	Rated Inductance per Phase (nH)	I Rated per Phase (Adc)[3]	I_{max} Peak per Phase (Adc)[3]	Pin Number	OCL (nH)[1, 2]	Pin Number	OCL (nH)[1, 2]	Magnetized Inductance (nH) @ 5Adc (25°C)
CL0904-2-50TR-R	2	0.35	50 ± 20%	35	80	(1-2)	320±20%	(3-4)	320±20%	245
CL0904-3-50TR-R	3	0.35	50 ± 20%	35	50	(3-4)	400±20%	(1-2), (5-6)	380±20%	250

1. Open Circuit Inductance (OCL)
2. Test Parameters: 1MHz, 0.1V_{rms}, 0.0Adc.
3. The rated current, Imax peak current, and rated inductance per phase is determined by Volterra's testing and circuit design. Additional information can be provided by contacting Volterra.
4. Part Number Definition: CL0904-x-50TR-R
   - CL0904= Product code and size
   - "x" = number of phases
   - "50" = inductance value per phase nH
   - "TR" = Tape and Reel packaging
   - "-R" suffix = RoHS compliant

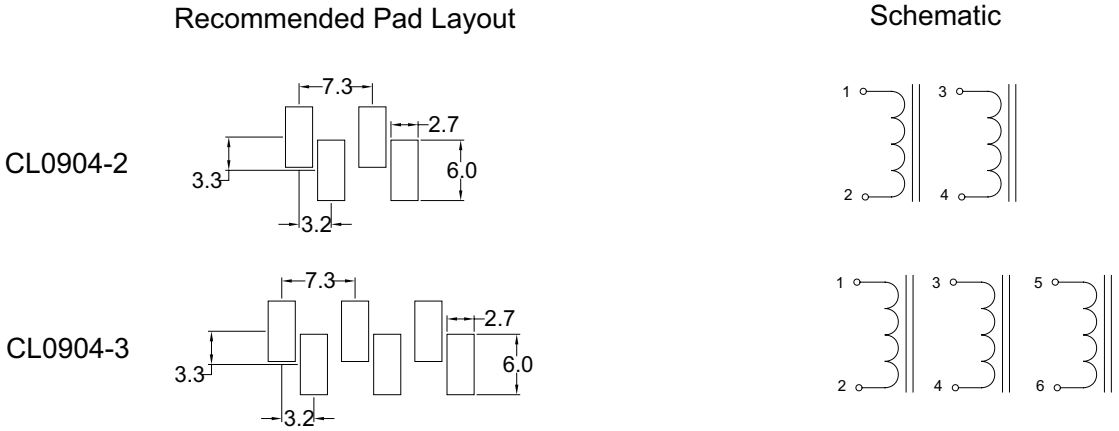
A This device is licensed for use only when incorporated within a voltage regulator employing power regulating devices manufactured by Maxim Integrated Devices. No license is granted expressly or by implication to use this device with power regulating devices manufactured by any company other than Maxim.

Dimensions- mm



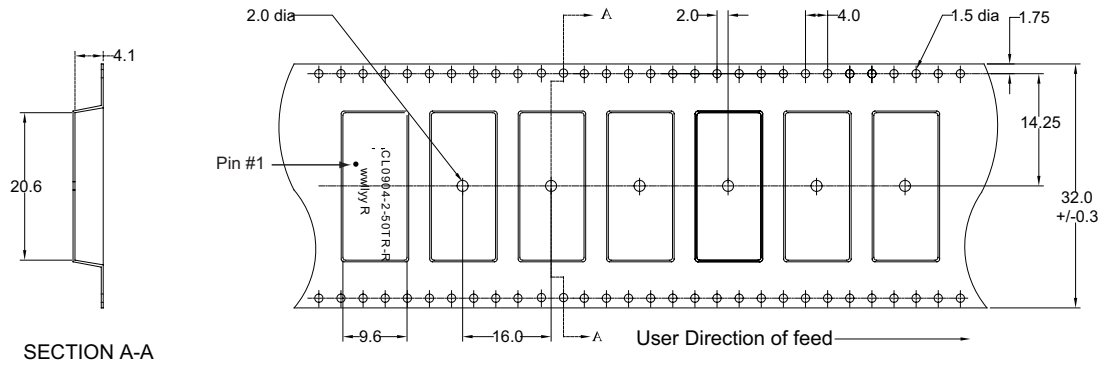
DCR measured from point 'a' to point "b"
Part Marking: CL0904= Product Code and Size -x (-2, -3)= Number of phases -50= inductance value per phase TR= Tape and Reel wwllyy= Date Code R=Revision Level
Soldering surfaces to be coplanar within 0.13 millimeters.

Pad layout and schematics- mm

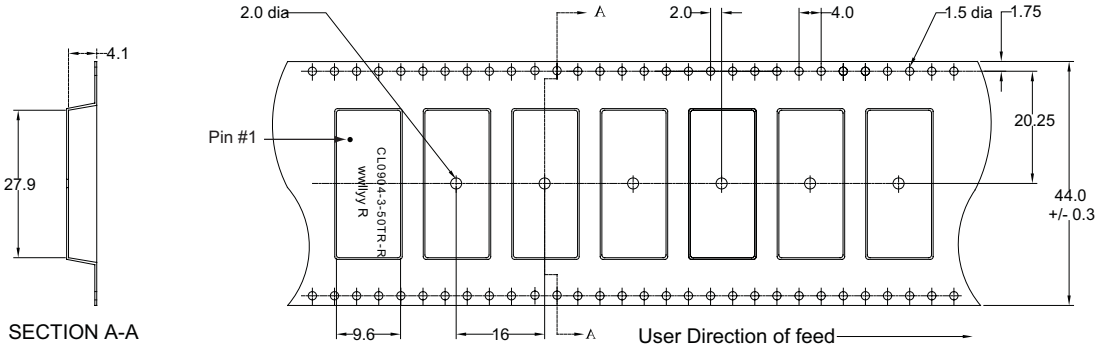


Packaging information- mm

CL094-2



CL094-3



Supplied in tape and reel packaging, 1000 parts per 13” diameter reel.

Solder Reflow Profile

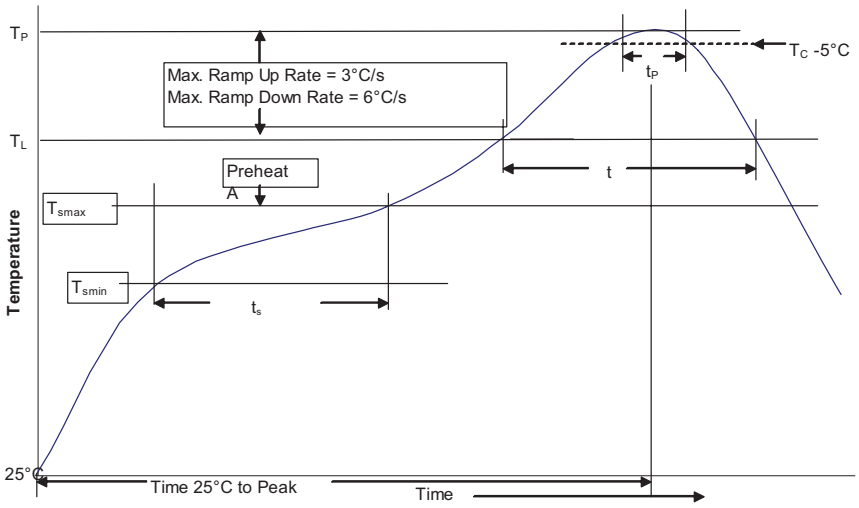


Table 1 - Standard SnPb Solder (T_C)

Package Thickness	Volume mm³ <350	Volume mm³ ≥350
<2.5mm	235°C	220°C
≥2.5mm	220°C	220°C

Table 2 - Lead (Pb) Free Solder (T_C)

Package Thickness	Volume mm³ <350	Volume mm³ 350 - 2000	Volume mm³ >2000
<1.6mm	260°C	260°C	260°C
1.6 – 2.5mm	260°C	250°C	245°C
>2.5mm	250°C	245°C	245°C

Reference JDEC J-STD-020

Profile Feature		Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and Soak	• Temperature min. (T_{smin})	100°C	150°C
	• Temperature max. (T_{smax})	150°C	200°C
	• Time (T_{smin} to T_{smax}) (t_s)	60-120 Seconds	60-120 Seconds
Average ramp up rate T_{smax} to T_p		3°C/ Second Max.	3°C/ Second Max.
Liquidous temperature (T_L) Time at liquidous (t_L)		183°C 60-150 Seconds	217°C 60-150 Seconds
Peak package body temperature (T_P)*		Table 1	Table 2
Time (t_p)** within 5 °C of the specified classification temperature (T_C)		20 Seconds**	30 Seconds**
Average ramp-down rate (T_p to T_{smax})		6°C/ Second Max.	6°C/ Second Max.
Time 25°C to Peak Temperature		6 Minutes Max.	8 Minutes Max.

* Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.

** Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.

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