

Features:

- Ideal for crossovers or jumpers on circuit boards with auto-insertion capability
- High current rating
- Cut and formed product is available on select sizes, contact Stackpole for details
- 100% RoHS compliant and lead free without exemption
- Halogen free
- REACH compliant

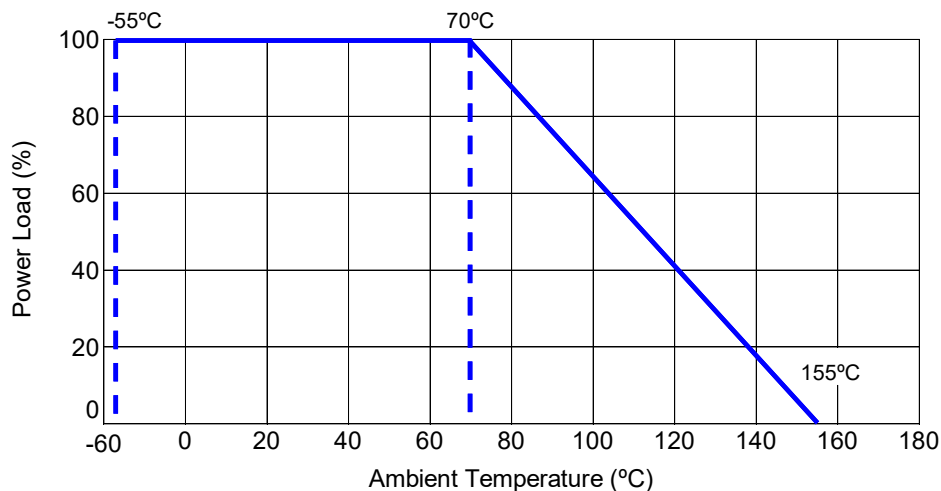


Electrical Specifications				
Part Number (zero Ohm)	Current Rating (A) @ 70°C	Dielectric Withstanding Voltage (V)	Marking	Resistance (Ω)
CD18	2	300	Single black band	0.01 or less
CD14	3	500		
CD12	4	600		

Operating temperature range is -55°C to +155°C

Mechanical Specifications					
Type/Code	A Body Length	B Body Diameter	C Lead Length (Bulk)	D Lead Diameter	Unit
CD18	0.126 ± 0.008	0.071 ± 0.008	1.102 ± 0.079	0.018 ± 0.0008	inches
	3.20 ± 0.20	1.80 ± 0.20	28.00 ± 2.00	0.45 ± 0.02	mm
CD14	0.236 ± 0.012	0.091 ± 0.008	1.102 ± 0.079	0.022 ± 0.0012	inches
	6.00 ± 0.30	2.30 ± 0.20	28.00 ± 2.00	0.55 ± 0.03	mm
CD12	0.354 ± 0.020	0.126 ± 0.020	1.024 ± 0.079	0.026 ± 0.0012	inches
	9.00 ± 0.50	3.20 ± 0.50	26.00 ± 2.00	0.65 ± 0.03	mm

Power Derating Curve:



Recommended Solder Profile

This information is intended as a reference for solder profiles for Stackpole resistive components. These profiles should be compatible with most soldering processes. These are only recommendations. Actual numbers will depend on board density, geometry, packages used, etc., especially those cells labeled with “*”.

100% Matte Tin / RoHS Compliant Terminations

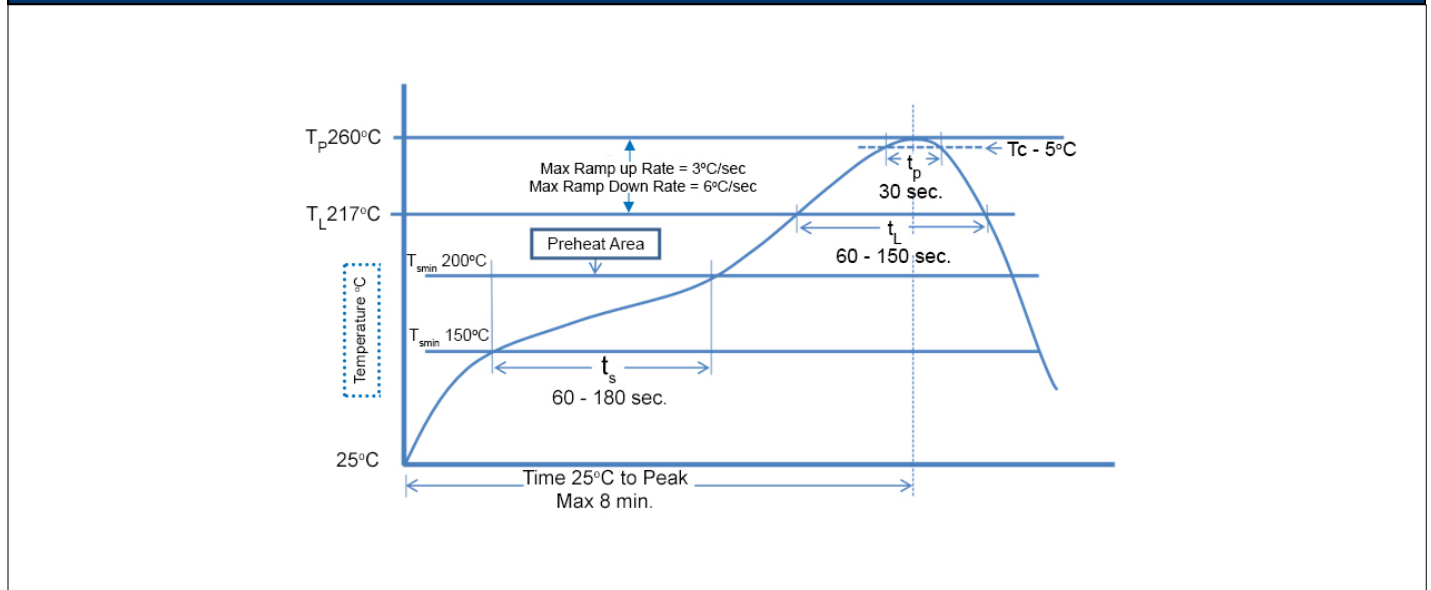
Soldering iron recommended temperatures: 330°C to 350°C with minimum duration.
Maximum number of reflow cycles: 3.

Wave Soldering			
Description	Maximum	Recommended	Minimum
Preheat Time	80 seconds	70 seconds	60 seconds
Temperature Diff.	140°C	120°C	100°C
Solder Temp.	260°C	250°C	240°C
Dwell Time at Max.	10 seconds	5 seconds	*
Ramp DN (°C/sec)	N/A	N/A	N/A

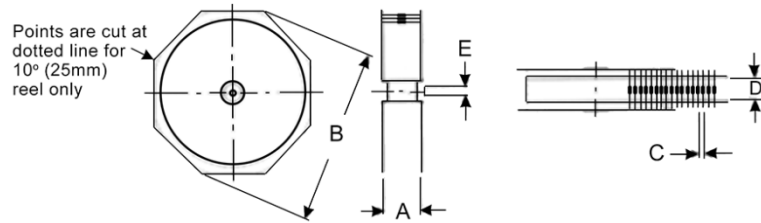
Temperature Diff. = Defference between final preheat stage and soldering stage.

Convection IR Reflow			
Description	Maximum	Recommended	Minimum
Ramp Up (°C/sec)	3°C/sec	2°C/sec	*
Dwell Time > 217°C	150 seconds	90 seconds	60 seconds
Solder Temp.	260°C	245°C	*
Dwell Time at Max.	30 seconds	15 seconds	10 seconds
Ramp DN (°C/sec)	6°C/sec	3°C/sec	*

Recommended Lead Free Resistor Reflow Profile



Packaging Specifications



Series	Size	A max ⁽¹⁾	B max	C	D ⁽²⁾	Tape	Unit
CD	18	2.508	13.504	0.197 ± 0.020	2.063 ± 0.079	0.250	inches
		63.70	343.00	5.00 ± 0.50	52.40 ± 2.00	6.35	mm
	14	2.618	13.504	0.197 ± 0.020	2.063 ± 0.079	0.250	inches
		66.50	343.00	5.00 ± 0.50	52.40 ± 2.00	6.35	mm
	12	2.736	13.504	0.197 ± 0.020	2.063 ± 0.079	0.250	inches
		69.50	343.00	5.00 ± 0.50	52.40 ± 2.00	6.35	mm

Dimension "E": This is a non-critical dimension that does not have a tolerance in the standard.

Range of diameters is from 0.547 inches (13.90 mm) to 1.500 inches (38.10 mm).

- (1) Reference value only. The "A" dimension shall be governed by the overall length of the taped component. The distance between flanges shall be 0.059 inches (1.50 mm) to 0.315 (8.00 mm) greater than the overall component.
- (2) The given dimension "D" expresses the standard width spacing. A 26 mm narrow spacing is available as option "N" packaging code.

RoHS Compliance

Stackpole Electronics has joined the worldwide effort to reduce the amount of lead in electronic components and to meet the various regulatory requirements now prevalent, such as the European Union's directive regarding "Restrictions on Hazardous Substances" (RoHS 3). As part of this ongoing program, we periodically update this document with the status regarding the availability of our compliant components. All our standard part numbers are compliant to EU Directive 2011/65/EU of the European Parliament as amended by Directive (EU) 2015/863/EU as regards the list of restricted substances.

RoHS Compliance Status

Standard Product Series	Description	Package / Termination Type	Standard Series RoHS Compliant	Lead-Free Termination Composition	Lead-Free Mfg. Effective Date (Std Product Series)	Lead-Free Effective Date Code (YY/WW)
CD	Axial Leaded Zero Ohm Resistor	Axial	YES	100% Matte Sn	Jan-04	04/01

"Conflict Metals" Commitment

We at Stackpole Electronics, Inc. are joined with our industry in opposing the use of metals mined in the "conflict region" of the eastern Democratic Republic of the Congo (DRC) in our products. Recognizing that the supply chain for metals used in the electronics industry is very complex, we work closely with our own suppliers to verify to the extent possible that the materials and products we supply do not contain metals sourced from this conflict region. As such, we are in compliance with the requirements of Dodd-Frank Act regarding Conflict Minerals.

Compliance to “REACH”

We certify that all passive components supplied by Stackpole Electronics, Inc. are SVHC (Substances of Very High Concern) free and compliant with the requirements of EU Directive 1907/2006/EC, “The Registration, Evaluation, Authorization and Restriction of Chemicals”, otherwise referred to as REACH. Contact us for complete list of REACH Substance Candidate List.

Environmental Policy

It is the policy of Stackpole Electronics, Inc. (SEI) to protect the environment in all localities in which we operate. We continually strive to improve our effect on the environment. We observe all applicable laws and regulations regarding the protection of our environment and all requests related to the environment to which we have agreed. We are committed to the prevention of all forms of pollution.

How to Order

