Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

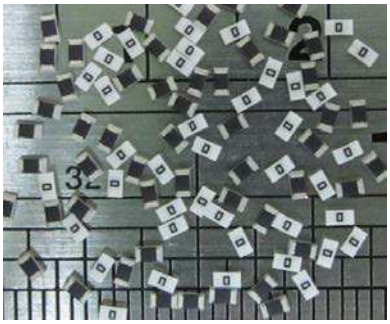
We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

Features:
- Chip size from 0402 to 2512
- Max. resistance value less than 3 milliohm for 0402, less than 0.5 milliohm for all other sizes
- Qualified to AEC-Q200
- RoHS compliant, lead-free and halogen-free

Applications:
- Switching power supply
- Voltage regulation module
- DC-DC converter, adaptor, battery pack, charger
- PDA and cell phone
- Power management applications

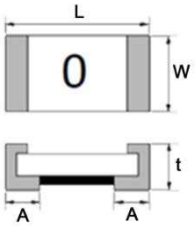


Electrical Specifications

Type / Code	Current Rating (A)	Power Rating (W)	Max Overload Current (A)	Operating Temperature Range	Ohmic Range (Ω)
HCJ0402	6.5	0.125	14.2	-55ºC to +155°C	≤ 0.003
HCJ0603	22.4	0.25	56		≤ 0.0005
HCJ0805	31.6	0.5	79		
HCJ1206	38.7	0.75	96.7		
HCJ2512	63.2	2	158		

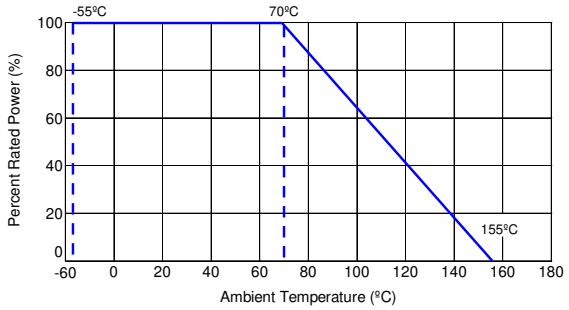
Power rating: $P=I^2*R$

Mechanical Specifications

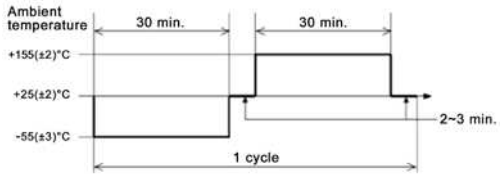


Type / Code	L	W	t	A	Unit
HCJ0402	0.039 ± 0.004 1.00 ± 0.10	0.020 ± 0.002 0.50 ± 0.05	0.016 ± 0.002 0.40 ± 0.05	0.012 ± 0.004 0.30 ± 0.10	inches mm
HCJ0603	0.061 ± 0.004 1.55 ± 0.10	0.031 ± 0.004 0.80 ± 0.10	0.018 ± 0.004 0.45 ± 0.10	0.014 ± 0.008 0.35 ± 0.20	inches mm
HCJ0805	0.083 ± 0.006 2.10 ± 0.15	0.053 ± 0.006 1.35 ± 0.15	0.028 ± 0.004 0.70 ± 0.10	0.022 ± 0.008 0.55 ± 0.20	inches mm
HCJ1206	0.122 ± 0.008 3.10 ± 0.20	0.061 ± 0.004 1.55 ± 0.10	0.028 ± 0.004 0.70 ± 0.10	0.031 ± 0.008 0.80 ± 0.20	inches mm
HCJ2512	0.256 ± 0.008 6.50 ± 0.20	0.126 ± 0.008 3.20 ± 0.20	0.030 ± 0.004 0.75 ± 0.10	0.033 ± 0.010 0.85 ± 0.25	inches mm

Power Derating Curve:

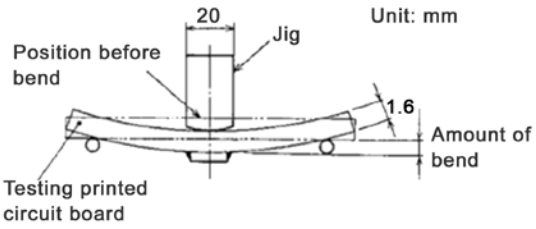
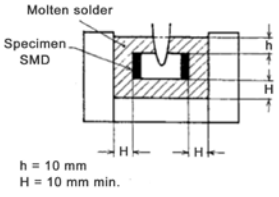


Environmental Performance Characteristics

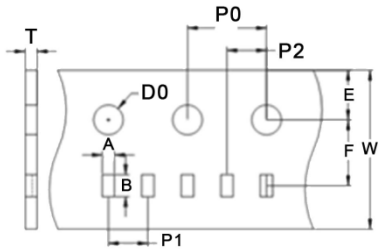
Test	Test Method	Test Specification	Test Condition
Short Time Overload	JIS-C5202-5.5	For 0402 size max. 0.003Ω All other sizes max. 0.0005Ω	2.5X rated current for 5 seconds
Damp Heat with Load	MIL-STD-202, Method 103		Specimens shall be placed in a chamber and subject to a relative humidity of 90~95% and to a temperature of 40ºC ± 2ºC for the period of 1000 hours
High Temperature Exposure	JIS-C5202-7.2		Part (mounted on board) is exposed in the heat chamber 125ºC ± 3ºC for 1000 hours
Load Life	JIS-C5202-7.10		Apply rated power at 70ºC ± 2ºC for 1000 hours with 1.5 hours ON and 0.5 hour OFF
Rapid Change of Temperature	JIS-C5202-7.4		Part (mounted on board) is exposed, -55ºC ± 3ºC (30 min.)/ +155°C ± 2ºC (30 minutes) for 5 cycles. The following conditions as per picture below. 

Note: Test board surface temperature shall not exceed 100ºC when applying rated current.
Storage Conditions: 5ºC ~ 35ºC. RH: 40%-75%

Function Performance Characteristics

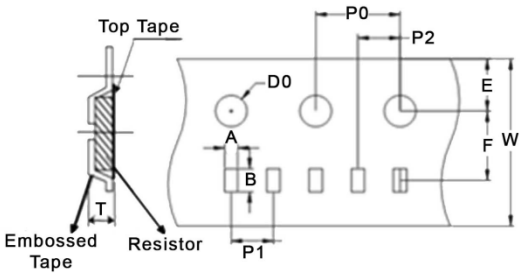
Test	Test Method	Test Specification	Test Condition
Bending Strength	JIS-C5202-6.1	For 0402 size max. 0.003Ω All other sizes max. 0.0005Ω	Mount part to test substrate. Apply pressure in direction of arrow unit band width reaches 0.5mm (+0.2/-0mm)(illustrated in the figure below) and hold for 10 seconds ± 1 second. 
Resistance to Solder Heat	MIL-STD-202, Method 210	For 0402 size max. 0.003Ω All other sizes max. 0.0005Ω	The part shall be immersed into the flux specified in the solder bath 260ºC ± 5ºC for 10 seconds ± 1 second
Solderability	JIS-C5 202-6.11	Solder shall be covered 95% or more of the electrode area	The part shall be immersed into the flux specified in the solder bath 235ºC ± 5ºC for 2 seconds ± 0.5 seconds. It shall be immersed to a point 10mm from its root. (Sn96.5/Ag3.0/Cu0.5) 

Taping Specifications – Paper Tape

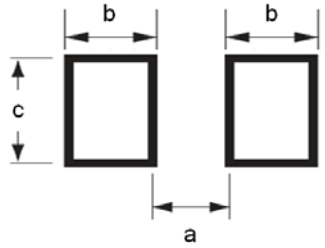


Type / Code	A	B	E	F	W	Unit
HCJ0402	0.028 ± 0.002 0.70 ± 0.05	0.047 ± 0.002 1.20 ± 0.05	0.069 ± 0.004 1.75 ± 0.10	0.138 ± 0.002 3.50 ± 0.05	0.315 ± 0.008 8.00 ± 0.20	inches mm
HCJ0603	0.043 ± 0.004 1.10 ± 0.10	0.075 ± 0.004 1.90 ± 0.10	0.069 ± 0.004 1.75 ± 0.10	0.138 ± 0.002 3.50 ± 0.05	0.315 ± 0.008 8.00 ± 0.20	inches mm
HCJ0805	0.063 ± 0.004 1.60 ± 0.10	0.094 ± 0.004 2.40 ± 0.10	0.069 ± 0.004 1.75 ± 0.10	0.138 ± 0.002 3.50 ± 0.05	0.315 ± 0.008 8.00 ± 0.20	inches mm
HCJ1206	0.079 ± 0.004 2.00 ± 0.10	0.142 ± 0.004 3.60 ± 0.10	0.069 ± 0.004 1.75 ± 0.10	0.138 ± 0.002 3.50 ± 0.05	0.315 ± 0.008 8.00 ± 0.20	inches mm
Type / Code	P0	P1	P2	D0	T	Unit
HCJ0402	0.157 ± 0.004 4.00 ± 0.10	0.079 ± 0.004 2.00 ± 0.10	0.079 ± 0.002 2.00 ± 0.05	0.061 ± 0.002 1.55 ± 0.05	0.018 ± 0.004 0.45 ± 0.10	inches mm
HCJ0603	0.157 ± 0.004 4.00 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	0.079 ± 0.002 2.00 ± 0.05	0.061 ± 0.002 1.55 ± 0.05	0.025 ± 0.004 0.64 ± 0.10	inches mm
HCJ0805	0.157 ± 0.004 4.00 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	0.079 ± 0.002 2.00 ± 0.05	0.061 ± 0.002 1.55 ± 0.05	0.038 ± 0.004 0.97 ± 0.10	inches mm
HCJ1206	0.157 ± 0.004 4.00 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	0.079 ± 0.002 2.00 ± 0.05	0.061 ± 0.002 1.55 ± 0.05	0.038 ± 0.004 0.97 ± 0.10	inches mm

Taping Specifications – Embossed Plastic Tape

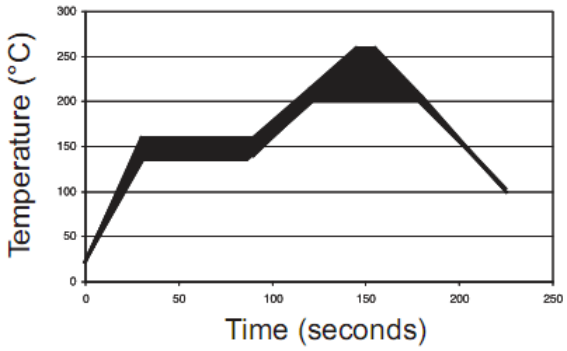


Type / Code	A	B	E	F	W	Unit
HCJ2512	0.138 ± 0.004 3.50 ± 0.10	0.268 ± 0.004 6.80 ± 0.10	0.069 ± 0.004 1.75 ± 0.10	0.217 ± 0.002 5.50 ± 0.05	0.472 ± 0.008 12.00 ± 0.20	inches mm
	P0	P1	P2	D0	T	Unit
	0.157 ± 0.002 4.00 ± 0.05	0.157 ± 0.004 4.00 ± 0.10	0.079 ± 0.002 2.00 ± 0.05	0.059 ± 0.004 1.50 ± 0.10	0.039 ± 0.008 1.00 ± 0.20	inches mm

Recommended Pad Layout					
Type / Code	a	b	c	Unit	
HCJ0402	0.016 0.40	0.020 0.50	0.024 0.60	inches mm	
HCJ0603	0.035 0.90	0.028 0.70	0.039 1.00	inches mm	
HCJ0805	0.047 1.20	0.047 1.20	0.055 1.40	inches mm	
HCJ1206	0.079 2.00	0.051 1.30	0.071 1.80	inches mm	
HCJ2512	0.150 3.80	0.083 2.10	0.134 3.40	inches mm	

Soldering Recommendations:

- Peak reflow temperatures and durations
  - ✓ IR Reflow Peak = 260ºC max for 10 seconds
  - ✓ Wave Solder = 260ºC max for 10 seconds
- Compatible with lead and lead-free solder reflow processes
- Recommended IR reflow profile:



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 2). 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.

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)
HCJ	Molded Metal Plate Sensing Resistor	SMD	YES	100% Matte Sn over Ni	Always	Always

"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

1	2	3	4	5	6	7	8	9	10	11	12	13
H	**C**	**J**	**0**	**6**	**0**	**3**	**Z**	**T**	**0**	**R**	**0**	**0**

Product Series
HCJ

Size	Rating Current
0402	6.5A
0603	22.4A
0805	31.6A
1206	38.7A
2512	63.2A

Tolerance			
Code	Tol	Size	Value (Ω)
Z	Zero Ohm	0402	<0.003
		0603	<0.0005
		0805	
		1206	
		2512	

Packaging			
Code	Description	Size	Quantity
T	Paper Tape	0402	10,000
		0603, 0805, 1206	5,000
	Embossed Plastic	2512	4,000

Resistance Value
Four characters with the multiplier used as the decimal holder.
0 ohm = 0R00