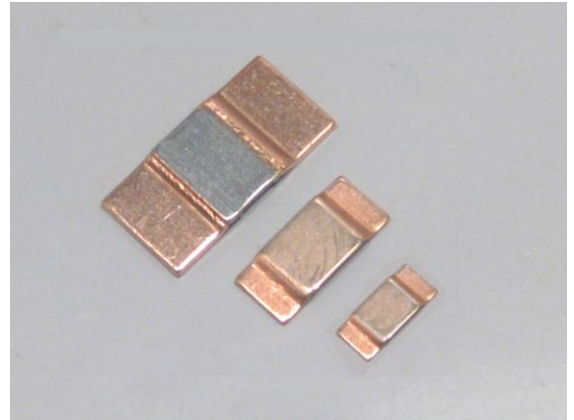


3W, 5W, 7W Current Sense Resistors RCS2512, RCS3920, RCS5930



Features and Applications

Presenting surface mounted, low resistance value, low profile, low inductance and large impulse durable metal plate current detectors.

Tolerance +/-1%, +/- 5 % and TC ±150ppm/°C or ±50ppm/°C in standard.

Current detection circuit for high speed CPU peripherals, battery charging current protections, DC-DC conversion modules, DC-AC conversion, servo-motor control electronics, intelligent power modules,

Dimension, Foot Pattern

RCS2512

RCS3920

RCS5930

Model		A	B	C	D	E	F
RCS2512	(mm)	6.35+/-0.15	3.02+/-0.2	D + E	(0.42)	(0.42)	1.14+/-0.400
RCS3920	(mm)	10.0+/-0.254	5.20+/-0.254	D + E	0.33 - 1.30	0.50	2.00+/-0.254
RCS5930	(mm)	15.0+/-0.254	7.75+/-0.254	D + E	0.27 - 1.23	0.50	4.00+/-0.254
RCS2512	(inches)	0.250+/-0.010	0.118+/-0.010	D + E	0.016	0.016	0.045+/-0.010
RCS3920	(inches)	0.395+/-0.010	0.205+/-0.010	D + E	0.0130 – 0.0510	0.020	0.080+/-0.010
RCS5930	(inches)	0.591+/-0.010	0.305+/-0.010	D + E	0.0105 – 0.0485	0.020	0.157+/-0.010

Dimensions 'D'

Model	Resistance	0.5 mΩ	1.0 mΩ	2.0 mΩ	3.0 mΩ	4 mΩ
RCS2512	(inches)	0.0334	0.0165	0.0181	0.0189	0.0141
RCS3920	(inches)	0.0300	0.0150	0.0270	0.0170	0.0130
RCS5930	(inches)	0.0180	0.0330	0.0155	0.0105	---

Dimensions, Foot print

Model		G	H	J
RCS2512	(inches)	0.071+/-0.010	0.134+/-0.005	0.133+/-0.010
RCS3920	(inches)	0.106+/-0.010	0.220+/-0.005	0.244+/-0.010
RCS5930	(inches)	0.205+/-0.010	0.220+/-0.005	0.344+/-0.010

3W, 5W, 7W Current Sense Chip Resistors

RCS2512, RCS3920, RCS5930

Specifications

Model	Size mm	Power Rating W	Tolerance %	Resistance Value mΩ	Weight g/1000 pieces
RCS2512	6.36mm x 3.02mm	2~3W	1.0, 5.0	0.3(3W), 0.5(3W), 1(3W), 2(3W), 3(2W), 4(2W), 5(2W)	120
RCS3920	10mm x 5.2mm	2~5W	1.0, 5.0	0.2(5W), 0.3(5W), 0.5(5W), 1(4W), 2(4W), 3(3W), 4(2.5W), 5(2W)	280
RCS5930	15mm x 7.75mm	4~10W	1.0, 5.0	0.2(10W), 0.3(7W), 0.5(6W, 7W))1(6W), 2(4W)	400

Ordering Information

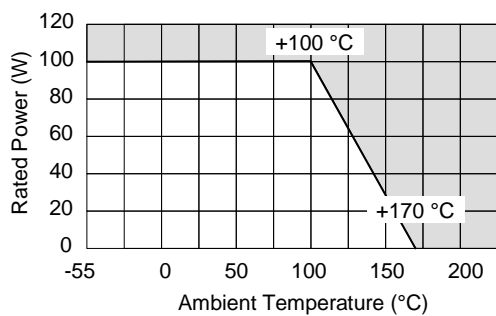
Type	Resistance	Tolerance	Option Code
RCS3920	R001	F	Z01
RCS2512	R0005	J (5%)	
RCS3920	R001	F (1%) std	
RCS5930	R002		
	R003		
	R004		

Tape & reel
RCS2512: 4000pcs/reel
RCS3920: 3000pcs/reel
RCS5930: 2000pcs/reel

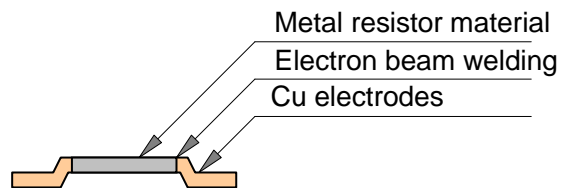
Specification and Performances

	RCS2512	RCS3920	RCS5930	Conditions
TCR	±150ppm/°C	±50ppm/°C	±50ppm/°C	-55°C to +60 °C range
Rating Current	45A	54A	70A	at 1mohm, and rated power
Maximum Current	67A	81A	105A	2.5 seconds one time
Series Inductance	1nH	2nH	5nH	
Operating Temp.	-55 °C to 175 °C			
Short Time Overload	+/-0.5%+0.5mohm)			maximum current, 2.5seconds.
Low Temperature Storage	+/-0.5%+0.5mohm)			-55°C, 24hours
High Temperature Storage	+/-1.0%+0.5mohm)			+170°C, 1000hours
Heat Shock	+/-0.5%+0.5mohm)			-55°C to +125°C, 20min. interval, 5min. 5cycles
Vibration	+/-0.5%+0.5mohm)			10-2000Hz, 1.5mm/20gr, 2hours
Soldering Heat	+/-0.25%+0.5mohm)			260C+/-5°C, 10+/-1seconds.
Solder ability	90%/terminal surface			
Humidity	+/-0.5%+0.1mohm)			85d°C, 85%RH, dc 0.1W, 1000 hours
Load Life	+/-0.5%+0.1mohm)			25°C, dc rated power, 90min ON, 30min OFF, 1000hours

Derating



Materials and Structure



Taping

