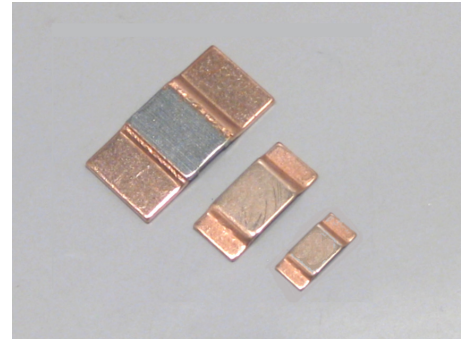


3W, 5W, 7W の電流検出抵抗器

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



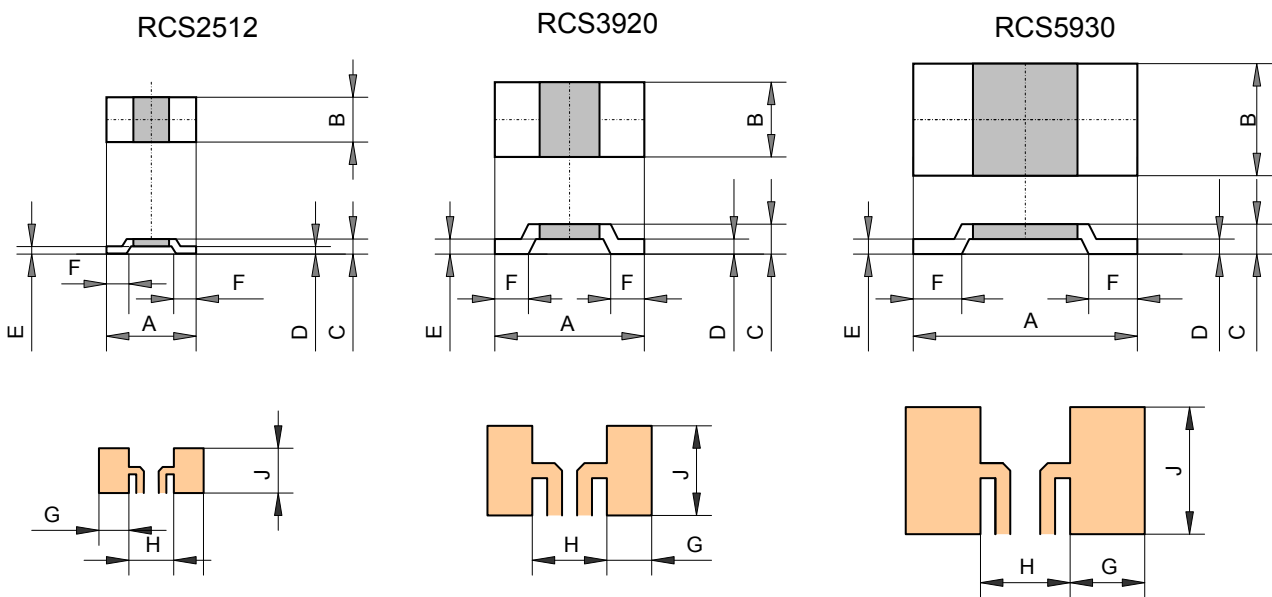
特長と用途

表面実装、メタルストリップ、EB 溶接の精密シャント抵抗器
抵抗値範囲は 0.5mΩ から 4mΩ、許容差は、 $\pm 1\%$ と $\pm 5\%$ 、抵抗温度係数 $\pm 150\text{ppm}/^\circ\text{C}$ または $\pm 50\text{ppm}/^\circ\text{C}$ が標準。小型軽量、インダクタンスが低く、耐パルス性に優れたシャント抵抗器。電池充電回路の電流検出、LSI チップの消費電流検出、モータ制御回路の電流検出、無停電装置の電流検出に適合します。

Features and Applications

Presenting surface mounted, low resistance value, low profile, low inductance and large impulse durable metal plate current detectors.
Tolerance $\pm 1\%$, $\pm 5\%$ and TC $\pm 150\text{ppm}/^\circ\text{C}$ or $\pm 50\text{ppm}/^\circ\text{C}$ 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,

外形寸法 Dimension, Foot Pattern



Model		A	B	C	D	E	F
RCS2512	(mm)	6.35 \pm 0.15	3.02 \pm 0.2	D + E	(0.42)	(0.42)	1.14 \pm 0.400
RCS3920	(mm)	10.0 \pm 0.254	5.20 \pm 0.254	D + E	0.33 - 1.30	0.50	2.00 \pm 0.254
RCS5930	(mm)	15.0 \pm 0.254	7.75 \pm 0.254	D + E	0.27 - 1.23	0.50	4.00 \pm 0.254
RCS2512	(inches)	0.250 \pm 0.010	0.118 \pm 0.010	D + E	0.016	0.016	0.045 \pm 0.010
RCS3920	(inches)	0.395 \pm 0.010	0.205 \pm 0.010	D + E	0.0130 - 0.0510	0.020	0.080 \pm 0.010
RCS5930	(inches)	0.591 \pm 0.010	0.305 \pm 0.010	D + E	0.0105 - 0.0485	0.020	0.157 \pm 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 \pm 0.010	0.134 \pm 0.005	0.133 \pm 0.010
RCS3920	(inches)	0.106 \pm 0.010	0.220 \pm 0.005	0.244 \pm 0.010
RCS5930	(inches)	0.205 \pm 0.010	0.220 \pm 0.005	0.344 \pm 0.010

3W, 5W, 7W の電流検出抵抗器 3W, 5W, 7W Current Sense Chip Resistors

RCS2512, RCS3920, RCS5930

仕様 Specifications

Model	Size mm	Power Rating W	Tolerance %	Resistance Value mΩ	Weight g/1000 pieces
RCS2512	6.36mm x 3.02mm	3.0	1.0, 5.0	0.3, 0.5, 1.0, 2.0, 3.0, 5.0	120
RCS3920	10mm x 5.2mm	3.0	1.0, 5.0	0.3, 0.5, 1.0, 2.0, 3.0, 4.0	280
RCS5930	15mm x 7.75mm	5.0	1.0, 5.0	0.2, 0.5, 1.0, 2.0, 3.0	400

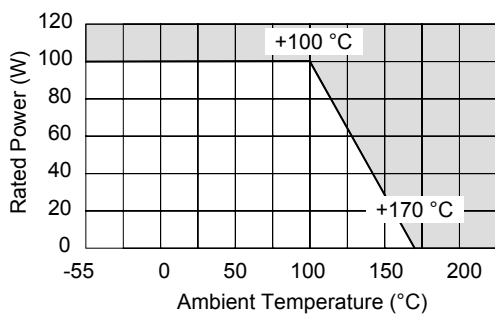
品目番号 Ordering Information

Type	Resistance	Tolerance	Option Code	Remarks
RCS3920	R001	J	Z01	4000pcs/reel
RCS2512	R005	J (5%) std	Z00	Bulk
RCS3920	R001	F (1%)	Z01	Tape Reel
RCS5930	R002			
	R003			
	R004			

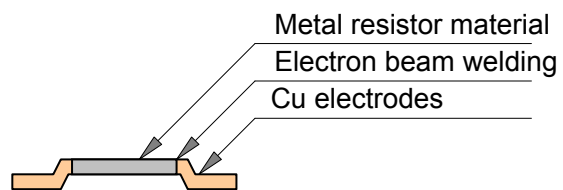
性能仕様 Specification and Performances

	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

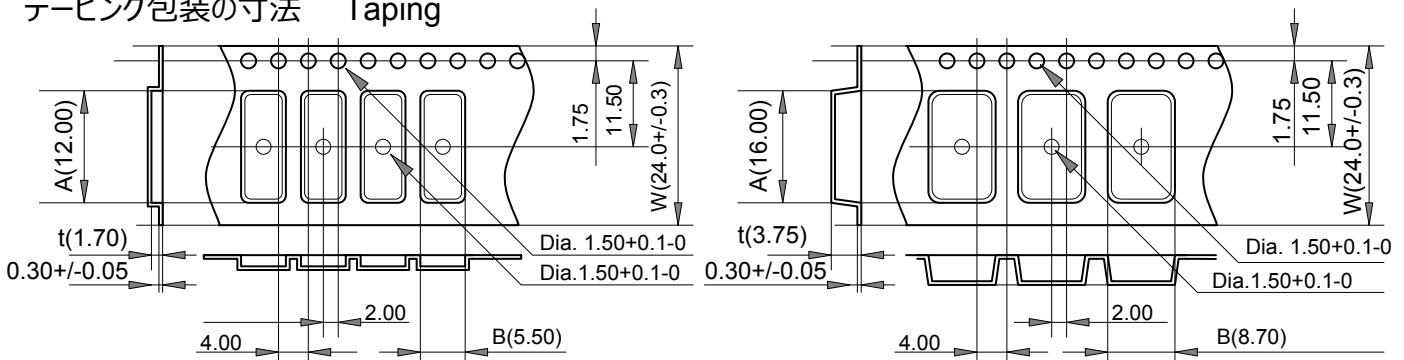
負荷軽減 Derating



材質と構造 Materials and Structure



テーピング包装の寸法 Taping



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