



SYNTON-TECH CORPORATION

CHIP RESISTOR

HIGH POWER ULTRA LOW RESISTANCE
METAL STRIP

File No.: RCCS2512-02-#T

Version: A

Page: 1/6

Date: 2021.01.01

1. SUBJECT

This specification applies on the chip resistors (high power ultra low resistance) metal strip was made of **SYNTON-TECH** Corporation .

2. FEATURES

- High Wattage Rating Up to 3W
- Low TCR ± 50 ppm/ $^{\circ}$ C
- Resistance Values from 0.5 to 100 m ohms
- Without Laser Trimmed with Very Low Inductance
- Customized Resistance Available

3. APPLICATIONS

- NB (for Power Management)
- MB (for Power Management)
- SWPS (DC-DC Converter, Charger, Adaptor)
- Monitor (for Power Management)

APPROVED	CHECKED	DESIGNED	REMARK	DOCUMENT NO.
Carol	May	Chen		0201010367

Confidential, Do Not Disseminate.



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Version: A

Page: 2/6

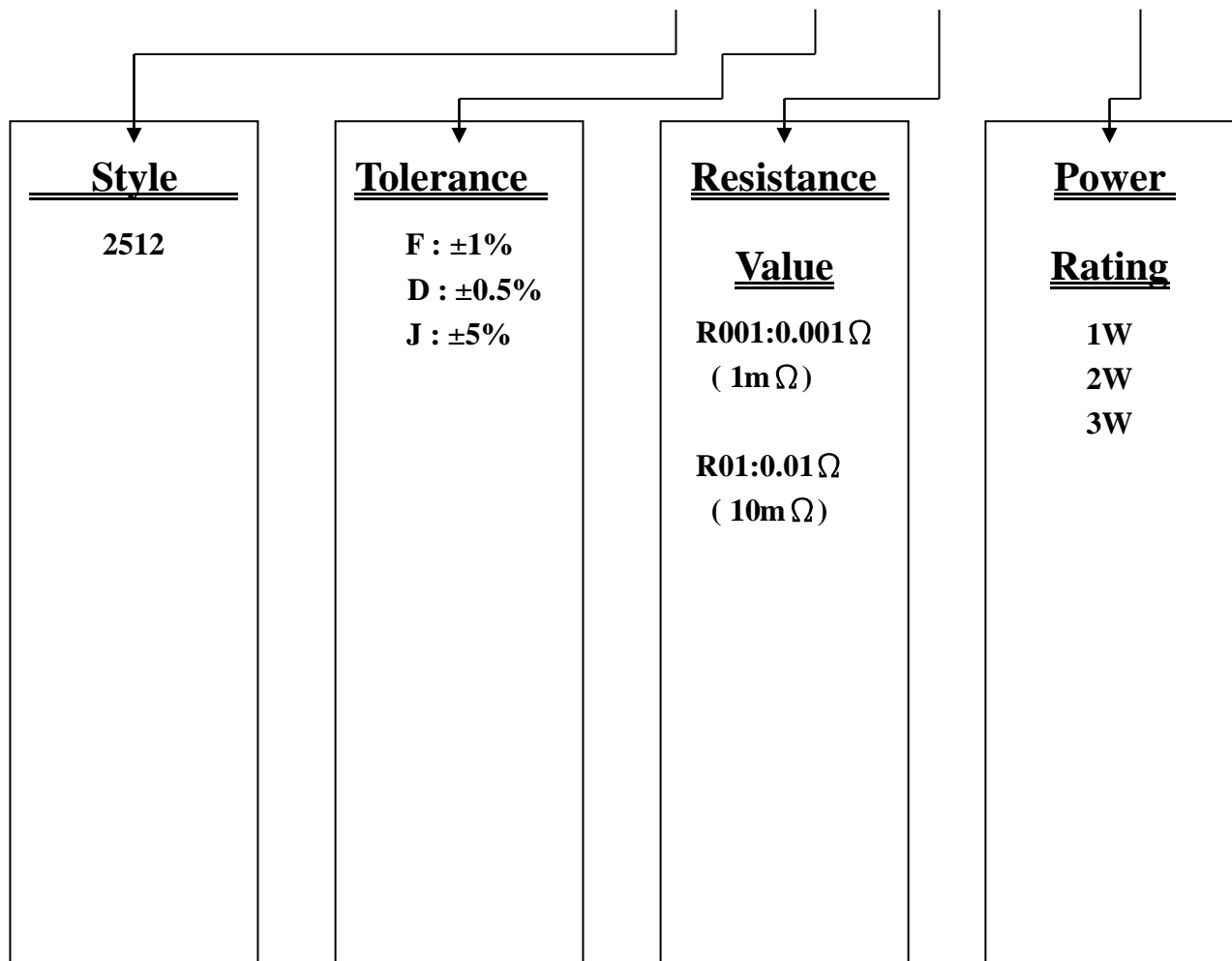
Date: 2021.01.01

4. PART NUMBER

Part number of the chip resistor is identified by the style, tolerance, resistance value °

Example : DESCRIPTION : 2512 2W 1% 0Ω01

SYNTON CODE : RCCS 2512 F 0R01 - 2W





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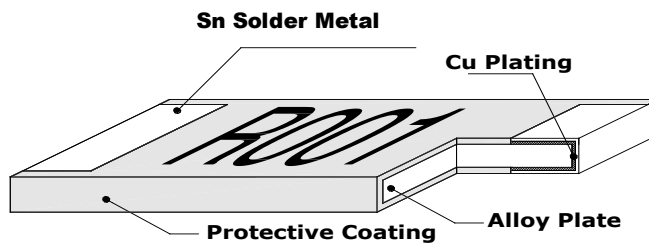
Version: A

Page: 3/6

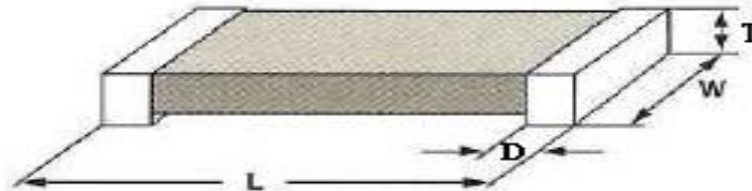
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5. CONSTRUCTION

(Black Coating)



6. DIMENSIONS



Unit: mm

Item Type	Power Rating at 100°C	Resistance (m Ω)	L	W	T	D
RCCS2512	1W	0.5 ~ 4	6.25±0.30	3.30±0.30	0.80±0.30	1.88±0.30
		5 ~ 100				1.13±0.30
RCCS2512	2W	0.5 ~ 4	6.25±0.30	3.30±0.30	0.80±0.30	1.88±0.30
		5 ~ 75				1.13±0.30
RCCS2512	3W	0.5	6.25±0.30	3.30±0.30	0.80±0.30	1.88±0.30
		0.6~2.9 5~10				1.13±0.30
		3 ~ 4				1.68±0.30



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Version: A

Page: 4/6

Date: 2021.01.01

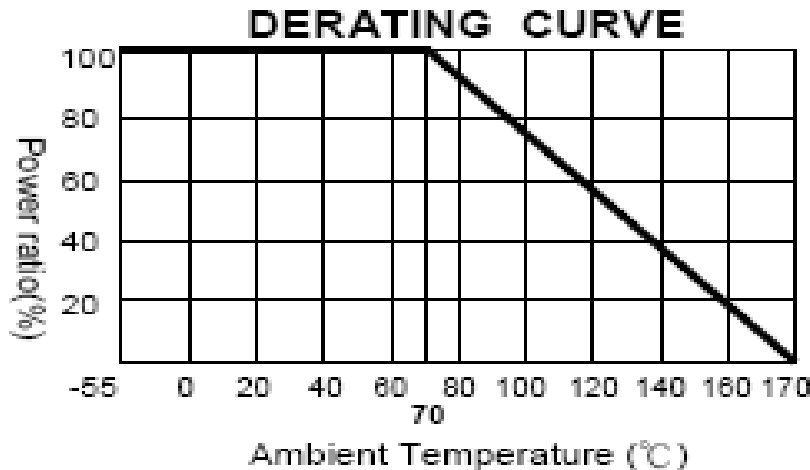
7. SPECIFICATION

Standard Electrical Specifications

Unit: mm

Item Type	Power Rating at 100°C	Operating Temp. Range(°C)	Max Rating Current (A)	Max Overload Current (A)	Resistance Range (mΩ)			TCR (PPM/°C)
					0.5%(D)	1.0%(F)	5.0%(J)	
RCCS2512	1W	-55~+170	44	100	7~100	0.5~100		±50
	2W		63	126	7~75	0.5~75		
	3W		77	134	7~10	0.5~10		

8. POWER DERATING CURVE



**SYNTON-TECH CORPORATION****CHIP RESISTOR****HIGH POWER ULTRA LOW RESISTANCE
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File No.: RCCS2512-02-#T

Version: A

Page: 5/6

Date: 2021.01.01

9. PERFORMANCE

Test Item	Conditions of test	Test Method
Thermal Shock	-55°C to +125°C, 1000 cycles, 15 minutes at each extreme	JIS C5201 4.19
Solder ability Test	Steam aging : 4hur, cool down 30 minutes then test	JIS C520 4.17
Low Temperature Storage	-55°C for 1000 hours	JIS C5201 4.36
High Temperature Exposure	1000 hours @ +155°C	JIS C5201 4.23.2
Bias Humidity	+85°C, 85% RH, 10% Bias, 1000 hours, 90 minutes "ON", 30 minutes "OFF"	JIS C5201 4.24
Mechanical Shock	100 grams for 6 milliseconds, 5 pulses	JIS C5201 4.27
Vibration	Frequency varied 55Hz in one minute, 3 direction, 12 hours	JIS C5201 4.21
Load Life	1000 hours @ rated power, +100°C, 1.5 hours "ON", 0.5 hours "OFF"	JIS C5201 4.25.1
Resistance to Solder Heat	Solder temp./immersion time : 245±5°C, 3±1secs and 350±10°C, 3.5±0.5secs	JIS C5201 4.18
Moisture Resistance	Mil-STD-202, Method 106, 0% power, 7a and 7b not required	JIS C5201 4.23.3
Resistance to Solvent	Immersion time : 60±5secs, 20°C ~ 25°C	JIS C5201 4.29



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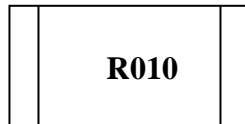
File No.: RCCS2512-02-#T

Version: A

Page: 6/6

Date: 2021.01.01

10. MARKING



Value=0.01 Ω (10m Ω)

11. PACKAGING

Unit: pcs

Packaging	Emboss Plastic Tape
Series RCCS2512	2,000 pcs