



Schedule of Scope to Certificate of Conformity Automotive Qualification Programme

IECQ Certificate No.: IECQ-C ULTW 18.0001

CB Certificate No.: 20002947 AQP

Schedule Number: IECQ-C ULTW 18.0001-S Rev No.: 2 Revision Date: 2021/09/18 Page 1 of 4

Approval Scope

Table 1 Resistance Range & Electrical Characteristics

Type	Power Rating at 70°C	Max. Working Voltage	Max. Over- Load Voltage	Operating Temperature (Temp. Range) (°C)		T.C.R (PPM/°C)	Resistance Range(Ω)			
				Min.	Max.		D(±0.5%) E-96&E-24	F(±1%) E-96&E-24	G(±2%) E-24	J(±5%) E-24
RMS02	1/20W	25V	50V	-55	125	±200	100Ω-10KΩ	10Ω-3MΩ	10Ω-3MΩ	10Ω-10MΩ
						+600 -200		1-9.1Ω	1-9.1Ω	1-9.1Ω
						±100	100Ω~1MΩ	100Ω~1MΩ		
RMS04	1/16W	50V	100V	-55	155	±200	10Ω ≤ R < 100Ω	10Ω ≤ R < 100Ω 1MΩ < R ≤ 10MΩ	10Ω-10MΩ	10Ω-10MΩ
						+500 -200		1Ω-9.1Ω	1Ω-9.1Ω	1Ω-9.1Ω
						±400				10MΩ ≤ R ≤ 20MΩ
RMS06	1/10W	50V	100V	-55	155	±100	10Ω-1MΩ	10Ω-1MΩ		
						±200		1M < R ≤ 10MΩ	10Ω-10MΩ	10Ω-10MΩ
						±400		1Ω-9.1Ω	1Ω-9.1Ω	1Ω-9.1Ω 10MΩ < R ≤ 20MΩ
RMS10	1/8W	150V	300V	-55	155	±100	10Ω-1MΩ	10Ω-1MΩ		
						±200		1M < R ≤ 10MΩ	10Ω-10MΩ	10Ω-10MΩ
						±400		1Ω-9.1Ω	1Ω-9.1Ω	1Ω-9.1Ω 10MΩ < R ≤ 20MΩ
RMS12	1/4W	200V	400V	-55	155	±100	10Ω-1MΩ	10Ω-1MΩ		
						±200		1M < R ≤ 10MΩ	10Ω-10MΩ	10Ω-10MΩ
						±400		1Ω-9.1Ω	1Ω-9.1Ω	1Ω-9.1Ω 10MΩ < R ≤ 20MΩ
RMS13	1/3W	200V	400V	-55	155	±100	10Ω-1MΩ	10Ω-1MΩ		
						±200		1M < R ≤ 10MΩ	10Ω-10MΩ	10Ω-10MΩ
						±400		1Ω-9.1Ω	1Ω-9.1Ω	1Ω-9.1Ω 10MΩ < R ≤ 20MΩ
RMS20	1/2W	200V	400V	-55	155	±100	10Ω-1MΩ	10Ω-1MΩ		
						±200		1M < R ≤ 10MΩ	10Ω-10MΩ	10Ω-10MΩ
						±400		1Ω-9.1Ω	1Ω-9.1Ω	1Ω-9.1Ω 10MΩ < R ≤ 20MΩ
RMS25	1W	200V	400V	-55	155	±100	10Ω-1MΩ	10Ω-1MΩ		
						±200		1M < R ≤ 10MΩ	10Ω-10MΩ	10Ω-10MΩ
						±400		1Ω-9.1Ω	1Ω-9.1Ω	1Ω-9.1Ω 10MΩ < R ≤ 20MΩ

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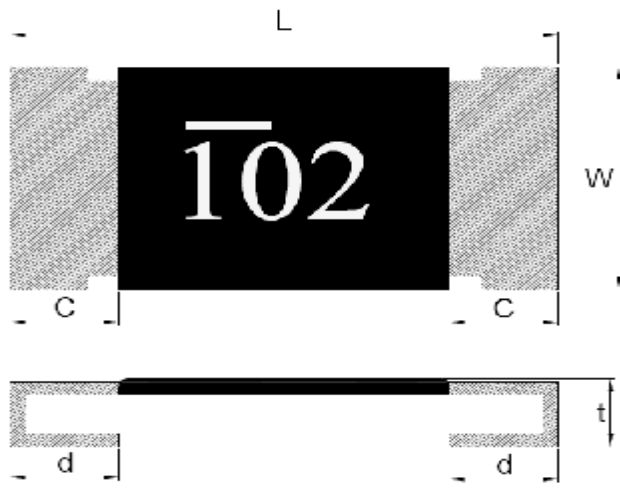
Table 2 Part Number

<p>RMS Product Code RMS: Anti-Sulfurated Chip Resistor</p>	<p>10 Size Power Rating</p>	<p>J Tolerance</p>	<p>T Packaging Resistance</p>	<p>103 Nominal</p>
<p>02-0201(0603) 1/20W 04-0402(1005) 1/16W 06-0603(1608) 1/10W 10-0805(2012) 1/8W 12-1206(3216) 1/4W 13-1210(3226) 1/3W 20-2010(5025) 1/2W 25-2512(6432) 1 W</p>	<p>J-±5% G-±2% F-±1% D-0.5%</p>	<p>T-Paper Tape E-Embossed Tape</p>	<p>3 digits, e.g., : (E-24) 103 = 10kΩ</p> <p>4 digits, e.g., : (E-96) 1540 = 154Ω 43R2 = 43.2Ω</p>	

1.1 Outline Drawing and Dimension

The outline drawing and dimension is listed as Table 3.

Table 3 Outline Drawing and Dimension



unit:mm

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Type	L	W	C	d	t
RMS02	0.6 ±0.03	0.3 ±0.03	0.1 ±0.05	0.15 ±0.05	0.23 ±0.03
RMS04	+0.1 1.00 -0.05	0.50±0.05	0.20±0.10	0.25±0.10	0.32±0.05
RMS06	1.60±0.10	0.80±0.10	0.30±0.20	+0.2 0.30 -0.1	0.45±0.10
RMS10	2.00±0.10	1.25±0.10	0.40±0.20	0.40±0.20	0.50±0.10
RMS12	3.10±0.10	1.55±0.10	0.50±0.30	0.40±0.20	0.55±0.10
RMS13	3.10±0.10	2.55±0.10	0.50±0.30	0.40±0.20	0.60±0.10
RMS20	5.00±0.15	2.50±0.15	0.60±0.30	0.50±0.25	0.60±0.10
RMS25	6.30±0.20	3.20±0.20	0.60±0.30	0.50±0.25	0.60±0.10

1.2 Related Documents

IECQ 03-1, Rule of Procedure – Part 1: General Requirements for all IECQ Schemes

IECQ 03-3, Rule of Procedure – Part 3: IECQ Approved Component Products, Related Materials & Assemblies Scheme

IECQ 03-3-2: Rule of Procedure – Part 3-2: IECQ Approved Component Products, Related Materials & Assemblies Scheme, IECQ Approved Component – Automotive Qualification Program (IECQ AC-AQP)

AEC-Q200 REV D, Stress Test Qualification for Passive Components

AEC-Q200-004A Resistance Measurement Method

AEC-Q200-002B Human Body Model Electrostatic Discharge Test

AEC-Q200-005A Board Flex Test

AEC-Q200-006A Terminal Strength(SMD)/Shear Stress Test

JEDEC JESD22-A104D Temperature Cycling

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JEDEC JEP 140 Beaded Thermocouple Temperature Measurement of Semiconductor Package

JEDEC JEP 153A Characterization and Monitoring Thermal Stress Test Oven Temperatures

MIL-STD-883K Method 2009 Test methods standard microcircuits

JEDEC JESD22-B100B Physical Dimensions

MIL-STD-202H, Test Method Standard, Electronic and Electrical Component Part

EIA/IPC/JEDEC J-STD-002D, Solderability Tests for Component Leads,
Terminations, Lugs, Terminals and Wires

ASTM-B-809-95(2013): Standard Test Method for Porosity in Metallic Coatings by Humid Sulfur
Vapor ("Flowers-of-Sulfur")

IEC 60115-1 Edition 4.0: Fixed Resistors for Use in Electronic Equipment - Part 1: Generic Specification

UL-94: Flammability

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