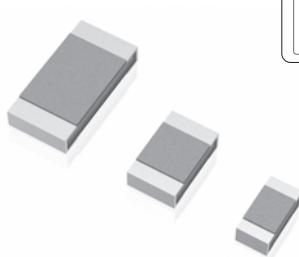


Precision SMD Bulk Metal® Foil Resistor (Wraparound)


 Made in
Japan

COMPOSITION OF TYPE NUMBER

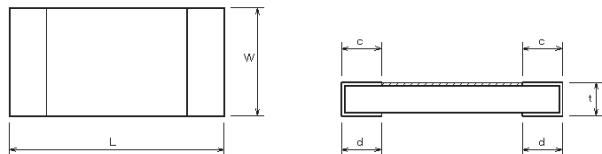
Example:

RWC 10K00 Q L

- Tape and Reel Package
- Resistance Tolerance
- Resistance Value
- Type

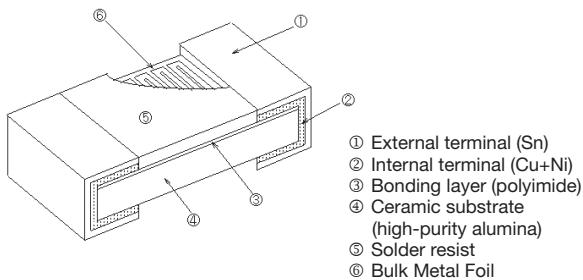
Resistance value is expressed by 4 numbers and 1 alphabet. R or K is a dual-purpose letter that designates both the value range (R for ohmic, K for kilohm) and the location of decimal point.

CONFIGURATION—DIMENSIONS IN mm



Type	RWA	RWB	RWC
L	1.6±0.2	2.0±0.2	3.2±0.2
W	0.8±0.2	1.25±0.2	1.6±0.2
t	0.5±0.1	0.5±0.1	0.5±0.1
c	0.3±0.25	0.4±0.25	0.5±0.25
d	0.3±0.25	0.4±0.25	0.5±0.25

CONSTRUCTION



FEATURES

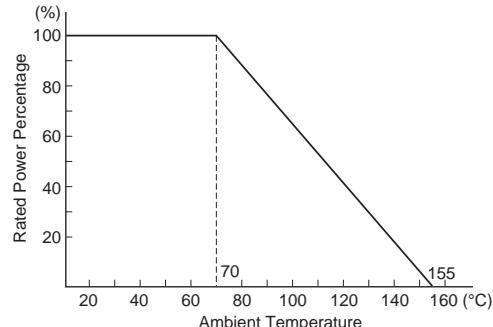
- High precision and stable Bulk Metal® Foil resistor with 0603, 0805 and 1206 package
- TCR: $0\pm 1\text{ppm}/^\circ\text{C}^*$, $0\pm 2\text{ ppm}/^\circ\text{C}$, $0\pm 5\text{ ppm}/^\circ\text{C}$
- Resistance tolerance: up to $\pm 0.01\%$
- Load-life stability: $\pm 0.005\%$ (typical, 70°C , 2000 hrs., rated power)
- AEC-Q200 qualified
- No standard resistance value (example: 1K234Ω)
- MOQ: 100 pieces

*Please contact us for availability.

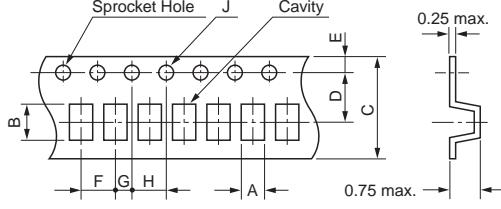
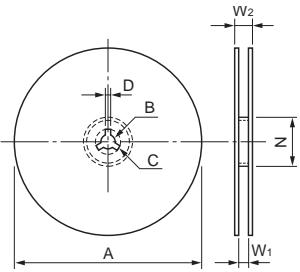
TCR, RESISTANCE RANGE, TOLERANCE, RATED POWER

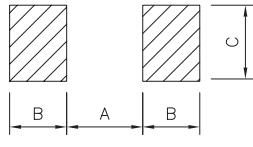
Type	TCR -25°C to $+125^\circ\text{C}$ ($\text{ppm}/^\circ\text{C}$)	Resistance Range (Ω)	Resistance Tolerance (%)	Rated Power at 70°C (W)
RWA	0 ± 5	100 to 1k	$\pm 0.1(\text{B})$	0.1
		1k to 5k	$\pm 0.05(\text{A})$	
RWB	0±10	10 to 30	$\pm 0.5(\text{D})$	0.2
	0±5	30 to 100	$\pm 0.1(\text{B})$	
	0±2	100 to 1k	$\pm 0.05(\text{A}), \pm 0.1(\text{B})$	
	0±2	1k to 10k	$\pm 0.02(\text{Q}), \pm 0.05(\text{A})$	
RWC	0±10	5 to 30	$\pm 0.5(\text{D})$	0.3
	0±5	30 to 100	$\pm 0.1(\text{B})$	
	0±2	100 to 1k	$\pm 0.02(\text{Q}), \pm 0.05(\text{A}), \pm 0.1(\text{B})$	
	0±2	1k to 30k	$\pm 0.01(\text{T}), \pm 0.02(\text{Q}), \pm 0.05(\text{A})$	

POWER DERATING CURVE



PERFORMANCE		SPECIFICATION	
PARAMETERS		TEST CONDITION	
		MIL-PRF-55342	ALPHA Typical
Max. Rated Operating Temperature		70°C	
Working Temperature Range		-65°C to +155°C	
Maximum Working Voltage		RWA=22V, RWB=45V, RWC=95V	
Thermal Shock		-65°C/30 min. ↔ +150°C/30 min. 100 cycles	
Overloading		Rated Voltage x 2.5, 5 sec.	
Low Temperature Storage		-65°C, No Load, 24 hrs. → Rated Power, 45 min.	
Resistance to Soldering Heat		+260°C, 10 sec.	
Moisture Resistance		+65°C to -10°C, 90% RH to 98% RH, Rated Voltage, 10 cycles (240 hrs.)	
Life		70°C, Rated Power, 1.5 hrs. ON, 0.5 hrs. OFF, 2,000 hrs.	
High Temperature Exposure		155°C, No Load, 100 hrs.	

TAPE AND REEL PACKAGE (BASED ON EIA-481-1) [DIMENSIONS IN mm]																
Tape Dimensions							Reel Dimensions									
																
Type	A	B	C	D	E	F	G	H	J	A	N	B	C	D	W ₁	W ₂
RWA	1.00 ±0.1	1.80 ±0.1	8.0 ±0.2	3.5 ±0.05	1.75 ±0.1	4.0 ±0.1	2.0 ±0.05	4.0 ±0.1	Dia. 1.55 ±0.55	Dia. 180 0/-1.5	Dia. 60 +1/0	Dia. 13 ±0.2	Dia. 21 ±0.8	2 ±0.5	9.0 +1/-0	13.0 ±1.0
RWB	1.45 ±0.1	2.25 ±0.1	8.0 ±0.2	3.5 ±0.05	1.75 ±0.1	4.0 ±0.1	2.0 ±0.05	4.0 ±0.1	Dia. 1.55 ±0.55							
RWC	1.90 ±0.1	3.50 ±0.1	8.0 ±0.2	3.5 ±0.05	1.75 ±0.1	4.0 ±0.1	2.0 ±0.05	4.0 ±0.1	Dia. 1.55 ±0.55							

PRECAUTION IN USING FACE-BONDED CHIP RESISTORS													
1. Storage													
Storage conditions or environment may adversely affect solderability of the exterior terminals. Do not store in high temperature and humidity. The recommended storage environment is lower than 40°C, has less than 70% RH humidity and is free from harmful gases such as sulphur and chlorine.													
2. Caution in Soldering													
① IR and vapor phase reflow are recommended. ② Vacuum pick up is recommended for handling. ③ If the use of a soldering iron becomes necessary, precautionary measures should be taken to avoid any possible damage / overheating.													
3. Cleaning													
Avoid the use of cleaning agents which could attack epoxy resins, which form part of the resistor construction.													
4. Recommended Land Pattern													
The dimensions of solder land must be determined in conformity with the size of resistors and with the soldering method. They are also subject to the mounting machine and the material of the substrate.													
													
Type	A	B	C										
RWA	0.8	0.9	1.0										
RWB	0.8	1.2	1.4										
RWC	1.6	1.5	1.8										
(mm)													