

Carbon Film Resistor – Normal & Miniature Style

Features

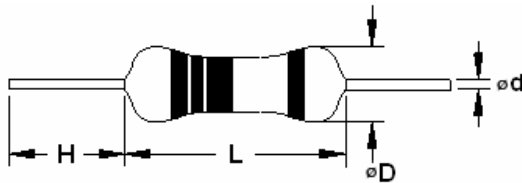
- Low cost
- Excellent long-term stability
- Tolerance: $\pm 2\%$, $\pm 5\%$
- ROHS compliant



Mechanical Data

- Exceeds carbon comp MIL-R-11 performance
- Bulk and 52mm tape and reel standard, cut and formed, or radial Panasert/Avisert available upon request

Dimensions (in mm)



Type		L	D	H	d
RCF08T	RCFS25T	3.4 \pm 0.3	1.9 \pm 0.2	28 \pm 2.0	0.5 \pm 0.05
RCF25T	RCFS50T	6.3 \pm 0.5	2.4 \pm 0.2	28 \pm 2.0	0.6 \pm 0.05
RCF50T	RCFS1W	9.0 \pm 0.5	3.3 \pm 0.3	26 \pm 2.0	0.6 \pm 0.05
RCF1W	RCFS2W	11.5 \pm 1.0	4.5 \pm 0.5	35 \pm 2.0	0.8 \pm 0.05
RCF2W	RCFS3W	15.5 \pm 1.0	5.0 \pm 0.5	33 \pm 2.0	0.8 \pm 0.05

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RCF & RCFS Series

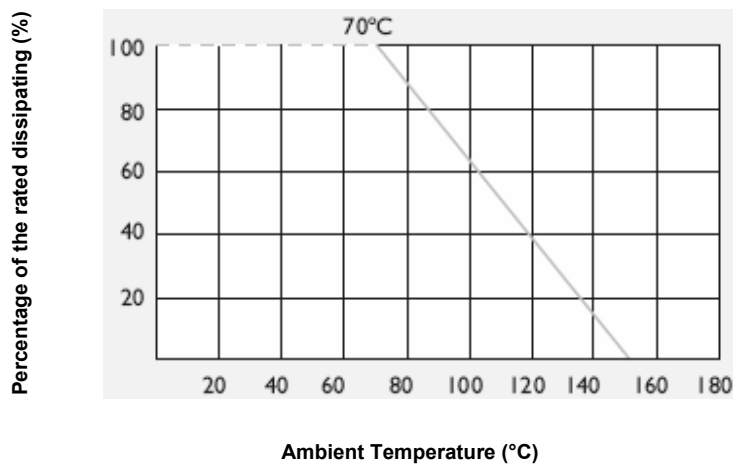
Absolute Maximum Ratings & Characteristics

Description		RCF 08T	RCF S25T	RCF 25T	RCF S50T	RCF 50T	RCF S1W	RCF 1W	RCF S2W	RCF 2W	RCF S3W	Unit
Power Rating at 70° C		1/8	1/4	1/4	1/2	1/2	1	1	2	2	3	W
Maximum Working Voltage		150	200	250	300	350	400	500	500	500	500	V
Maximum Overload Voltage		300	400	500	600	700	800	1000	1000	1000	1000	V
Dielectric Withstanding Voltage		300	400	500	500	500	700	1000	1000	1000	1000	V
Temperature Coefficient	<100K Ω	+350/-500						±350				ppm/° C
	100K Ω~1M Ω	+350/-700						+350/-500				
	1M Ω~10M Ω	+350/-1500						+350/-1500				
Resistance Range(Note1)	(±2%, ±5%)	1~10M									Ω	
Operating Temperature Range		-55 to +155									° C	

Note1: For a zero ohm resistor, it is similar to a 1/4W resistor(1/8W size also available, typical resistance 0.004 Ω.

Power derating curve

For resistors operate in the ambient temperature over 70°C, loading power ratio will derate in accordance with following curve.



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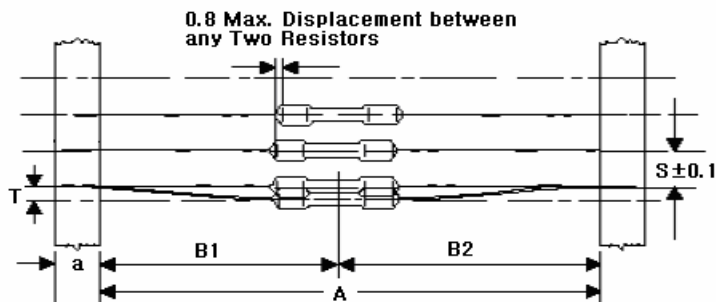
Environmental Performance Specification

Item	Test Methods		Specifications
Short Time Overload	JIS-C-5202 5.5	2.5 Times RCWV for 5 seconds	$\pm(0.75\% + 0.05\Omega)$
Dielectric Withstanding Voltage	JIS-C-5202 5.7	In V-Block for 60 Seconds	by Type
Insulation Resistance	JIS-C-5202 5.6	In V-Block	$>1000M\Omega$
Solderability	JIS-C-5202 6.5	$260^{\circ}C \pm 5^{\circ}C$ for 5 ± 0.5 Seconds	Covering 95%
Terminal Strength	Direct Load for 10 Seconds in The Direction of The Terminal Leads		$\geq 2.5kg$ (24.5N)
Pulse Overload	JIS-C-5202 5.8	4 Times RCWV 1000 Cycle (1 sec. on, 25 sec. off)	$\pm(1\% + 0.05\Omega)$
Load Life in Humidity	JIS-C-5202 7.9	$40 \pm 2^{\circ}C$, 90-95% RH at RCWV for 1000 hours (1.5 Hrs. on, 0.5 Hrs. off)	$\pm(3\% + 0.05\Omega)$
Load Life	JIS-C-5202 7.10	$70^{\circ}C$ at RCWV for 1000 Hrs (1.5 Hrs. on, 0.5 Hrs. off)	$\pm(3\% + 0.05\Omega)$
Temperature Cycling	JIS-C-5202 7.4	$-55^{\circ}C \rightarrow$ Rom Temp. $\rightarrow +155^{\circ}C \rightarrow$ Rom Temp. for 5 Cycles	$\pm(1\% + 0.05\Omega)$
Resistance to Soldering Heat	JIS-C-5202 6.4	$350 \pm 10^{\circ}C$ for 3 ± 0.5 Seconds	$\pm(1\% + 0.05\Omega)$

* Rated Continuous Working Voltage (RCWV) = $\sqrt{\text{Power Rating} \times \text{Resistance Value}}$

Packing Information:

Carrier Tape Dimensions (in mm)

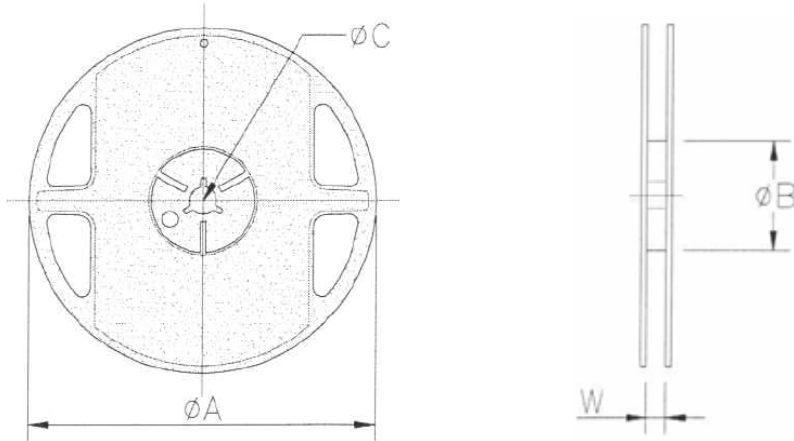


Type		a	A	B1-B2	S (Spacing)	T (Max. Deviation of Spacing)
RCF08T	RCFS25T	6 ± 0.5	52.4 ± 1.5	1.2	5	1mm Per 10 Spacing, 0.5mm per 5 spacing
RCF25T	RCFS50T	6 ± 0.5	52.4 ± 1.5	1.2	5	
RCF50T	RCFS1W	6 ± 0.5	52.4 ± 1.5	1.2	5	
RCF1W	RCFS2W	6 ± 0.5	73.0 ± 1.5	1.2	5	
RCF2W	RCFS3W	6 ± 0.5	73.0 ± 1.5	1.5	10	

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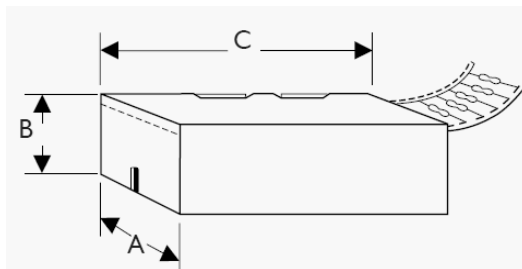
RCF & RCFS Series

Reel Dimensions (in mm)



Type		Reel Diameter	PCS per Reel	A	B	C	W
RCF08T	RCFS25T	12"	5,000	305	51	15	72
RCF25T	RCFS50T		5,000				48/72
RCF50T	RCFS1W		2,500				72
RCF1W	RCFS2W		2,000				95
RCF2W	RCFS3W		1,000				92

Box Dimensions (in mm)



Type		PCS per Reel	W(A)	H(B)	L(C)
RCF08T	RCFS25T	5,000	81	70	260
RCF25T	RCFS50T	5,000	81	104	260
RCF50T	RCFS1W	1,000	73	45	258
RCF1W	RCFS2W	1,000	103	78	260
RCF2W	RCFS3W	1,000	103	94	260

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Carton Information

Tape/Reel

Type		PCS per Carton	Carton Size
RCF08T	RCFS25T	50,000	600X320X430(in mm)
RCF25T	RCFS50T	50,000	600X320X430(in mm)
RCF50T	RCFS1W	25,000	600X320X430(in mm)
RCF1W	RCFS2W	20,000	600X320X545(in mm)
RCF2W	RCFS3W	10,000	600X320X545(in mm)

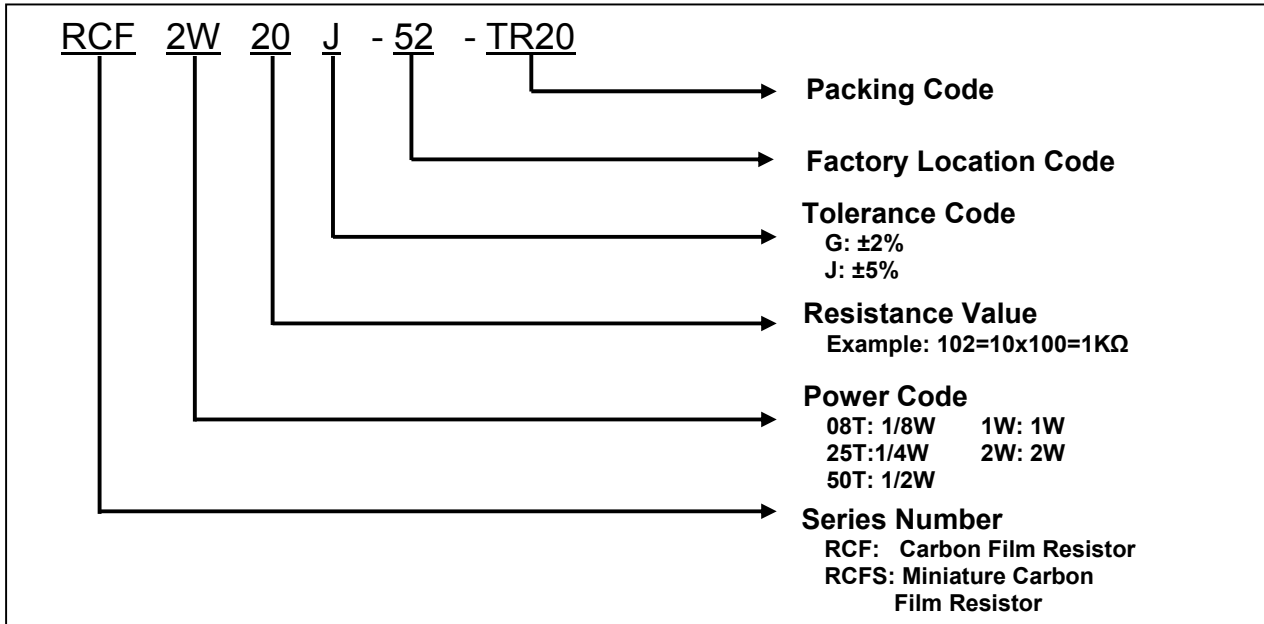
Tape/Box

Type		PCS per Carton	Carton Size
RCF08T	RCFS25T	100,000	440X280X360(in mm)
RCF25T	RCFS50T	75,000	440X280X360(in mm)
RCF50T	RCFS1W	30,000	440X280X360(in mm)
RCF1W	RCFS2W	16,000	440X280X360(in mm)
RCF2W	RCFS3W	12,000	280X460X300(in mm)

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RCF & RCFS Series

How to order:



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