

Carbon Film Resistor – Normal & Miniature Style

**Features**

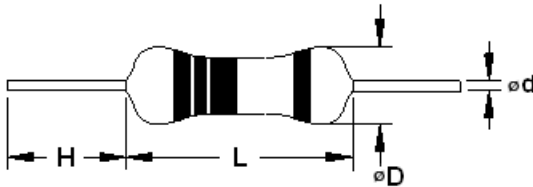
- Low cost
- Excellent long-term stability
- Tolerance:  $\pm 2\%$ ,  $\pm 5\%$
- RoHS compliant and halogen free



**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)**



Outline	Type		L	ΦD	H	Φd
T-12	RCF08T	RCFS25T	3.4±0.3	1.9±0.2	28±2.0	0.45±0.05
T-25	RCF25T	RCFS50T	6.3±0.5	2.4±0.2	28±2.0	0.55±0.05
T-50	RCF50T	RCFS1W	9.0±0.5	3.3±0.3	26±2.0	0.55±0.05
T-100	RCF1W	RCFS2W	11.5±1.0	4.5±0.5	35±2.0	0.8±0.05
T-200	RCF2W	RCFS3W	15.5±1.0	5.0±0.5	33±2.0	0.8±0.05

# Carbon Film Resistor - Normal & Miniature Style

## RCF & RCFS Series

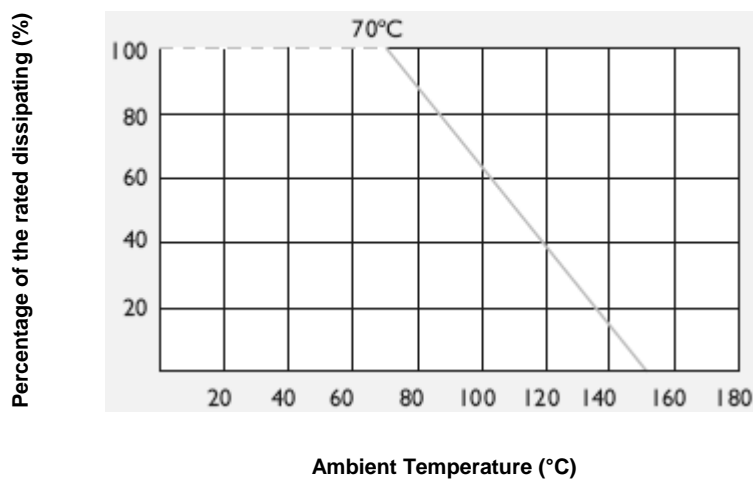
### Absolute Maximum Ratings & Characteristics

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	1/6	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	<100KΩ	-350~500					-350~350					ppm/° C
	100KΩ~1MΩ	-700~0					-500~0					
	1MΩ~10MΩ	-1500~0					-1500~0					
Resistance Range(Note1)	(±2%, ±5%)	1~10M & 0									Ω	
Operating Temperature Range	-55 to +155										° C	

Note. \* Current Rating for Zero Ohm Resistors - 15A for T-25 and 10A for T-12 at 70 degrees Ambient Temperature. Resistance ≤.005 Ohm.

### 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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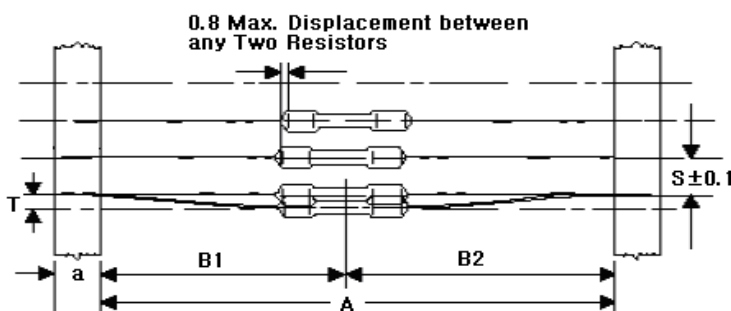
### Environmental Performance Specification

Item	Test Methods		Specifications
Short Time Overload	IEC 60115-1 4.13	2.5 Times RCWV for 5 seconds	$\pm(0.75\%+0.05\Omega)$
Dielectric Withstanding Voltage	IEC 60115-1 4.7	In V-Block for 60 Seconds	by Type
Insulation Resistance	IEC 60115-1 4.6	In V-Block for 60 Sec	>1000M $\Omega$
Solderability	IEC 60115-1 4.17	235°C $\pm$ 5°C for 3 $\pm$ 0.5 Seconds	95% Min. Coverage
Terminal Strength	IEC 60115-1 4.16	Direct Load for 10 Seconds in The Direction of The Terminal Leads	$\geq$ 2.5kg (24.5N)
Pulse Overload	IEC 60115-1 4.39	4 Times RCWV 1000 Cycle (1 sec. on, 25 sec. off)	$\pm(1\%+0.05\Omega)$
Load Life in Humidity	IEC 60115-1 4.24	40 $\pm$ 2°C, 90-95% RH at RCWV for 56 days, loaded with 0.1 times RCWV	$\pm(3\%+0.05\Omega)$
Load Life	IEC 60115-1 4.25	70°C at RCWV for 1000 Hrs (1.5 Hrs. on, 0.5 Hrs. off)	$\pm(3\%+0.05\Omega)$
Temperature Cycling	IEC 60115-1 4.19	-55°C $\rightarrow$ Rom Temp. $\rightarrow$ +155°C $\rightarrow$ Rom Temp. for 5 Cycles	$\pm(1\%+0.05\Omega)$
Resistance to Soldering Heat	IEC 60115-1 4.18	260°C $\pm$ 3°C for 10 $\pm$ 1 Seconds, immersed to a point 3 $\pm$ 0.5mm from the body	$\pm(1\%+0.05\Omega)$

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

### Packing Information:

#### Carrier Tape Dimensions (in mm)

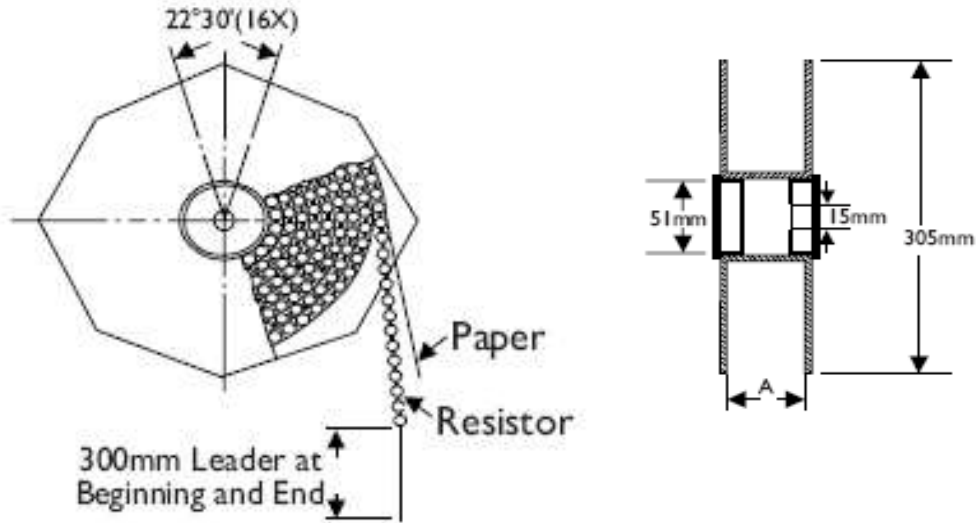


Outline	Type		a	A	B1-B2	S (Spacing)	T (Max. Deviation of Spacing)
T-12	RCF08T	RCFS25T	6 $\pm$ 0.5	52.4 $\pm$ 1.5	1.2	5	1mm Per 10 Spacings, 0.5mm Per 5 Spacings
T-25	RCF25T	RCFS50T	6 $\pm$ 0.5	52.4 $\pm$ 1.5	1.2	5	
T-50	RCF50T	RCFS1W	6 $\pm$ 0.5	52.4 $\pm$ 1.5	1.2	5	
T-100	RCF1W	RCFS2W	6 $\pm$ 0.5	73.0 $\pm$ 1.5	1.5	5	
T-200	RCF2W	RCFS3W	6 $\pm$ 0.5	73.0 $\pm$ 1.5	1.5	10	

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### Tape on Reel Pack Information

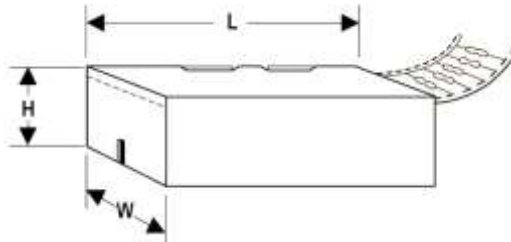


Outline	Reel/Inner Box Qty.	Across Flange (A)	Inner Box Size (LxWxH)	Inner Box Weight	Carton Qty.	Carton Size (LxWxH)	Carton Weight
	(pcs)	(mm)	(cm)	(kg)	(pcs)	(cm)	(kg)
T-12	5,000	72	29.0x8.0x29.6	0.90	50,000	60.0x30.5x43.5	11
T-25	5,000	72	29.0x8.0x29.6	1.40	50,000	60.0x30.5x43.5	16
T-50	2,500	72	29.0x8.0x29.6	1.38	25,000	60.0x30.5x43.5	15
T-100	2,000	95	29.2x9.8x29.6	1.95	20,000	60.0x30.5x54.5	21
T-200	1,000	95	29.2x9.8x29.6	1.50	10,000	60.0x30.5x54.5	16

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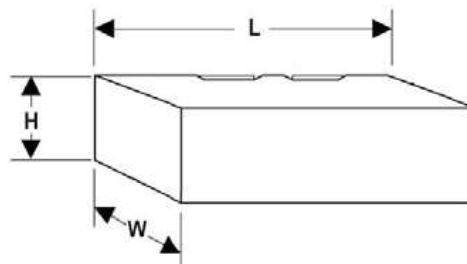
## RCF & RCFS Series

### Ammo Pack Information



Outline	Inner Box Qty.	Inner Box Size (LxWxH)	Inner Box Weight	Carton Qty.	Carton Size (LxWxH)	Carton Weight
	(pcs)	(cm)	(kg)	(pcs)	(cm)	(kg)
T-12	5,000	26.0x8.0x10.0	0.66	100,000	42.5x28.0x34.8	13.30
T-25	5,000	25.8x7.4x9.0	1.08	75,000	42.5x28.0x34.8	16.30
T-50	1,000	26.5x9.7x7.8	0.36	30,000	42.5x28.0x34.8	10.90
T-100	1,000	26.3x9.7x9.5	0.74	12,000	42.5x28.0x34.8	8.98
T-200	1,000	26.3x9.7x9.5	1.20	12,000	42.5x28.0x34.8	14.50

### Bulk Pack Information

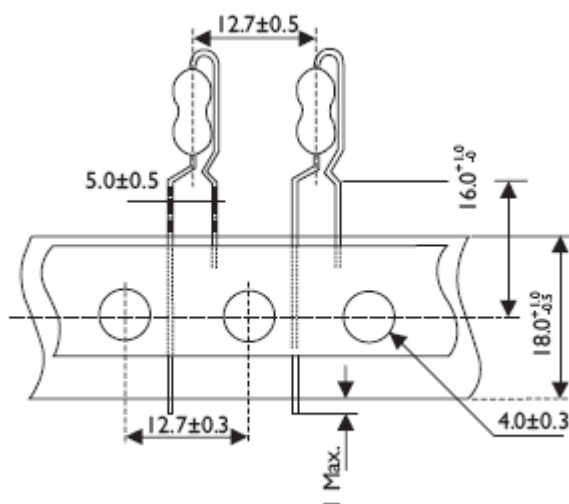


Outline	Inner Box Qty.	Inner Box Size (LxWxH)	Inner Box Weight	Carton Qty.	Carton Size (LxWxH)	Carton Weight
	(pcs)	(cm)	(kg)	(pcs)	(cm)	(kg)
T-12	10,000	26.3x9.7x11.7	1.10	160,000	42.5x28.0x34.8	18.2
T-25	10,000	26.3x9.7x11.7	1.82	100,000	42.5x28.0x34.8	19.0
T-50	5,000	26.3x9.7x11.7	1.93	50,000	42.5x28.0x34.8	20.0
T-100	2,000	26.3x9.7x11.7	1.64	32,000	42.5x28.0x34.8	26.0
T-200	1,000	26.3x9.7x11.7	1.06	16,000	42.5x28.0x34.8	18.0

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### Panasert Type Forming for Taping



Outline	Type		L	ΦD	H	Φd
T-25	RCF25T	RCFS50T	6.3±0.5	2.4±0.2	28±2.0	0.55±0.05
T-50	RCF50T	RCFS1W	9.0±0.5	3.3±0.3	26±2.0	0.55±0.05

### Panasert Type Pack Information

#### Tape on Reel Pack Information

Outline	Reel/Inner Box Qty. (pcs)	Inner Box Weight (kg)	Carton Qty. (pcs)	Carton Size (LxWxH) (cm)	Carton Weight (kg)
T-25	2,500	0.94	20,000	34x34x45	9
T-50	2,500	0.94	20,000	34x34x45	9

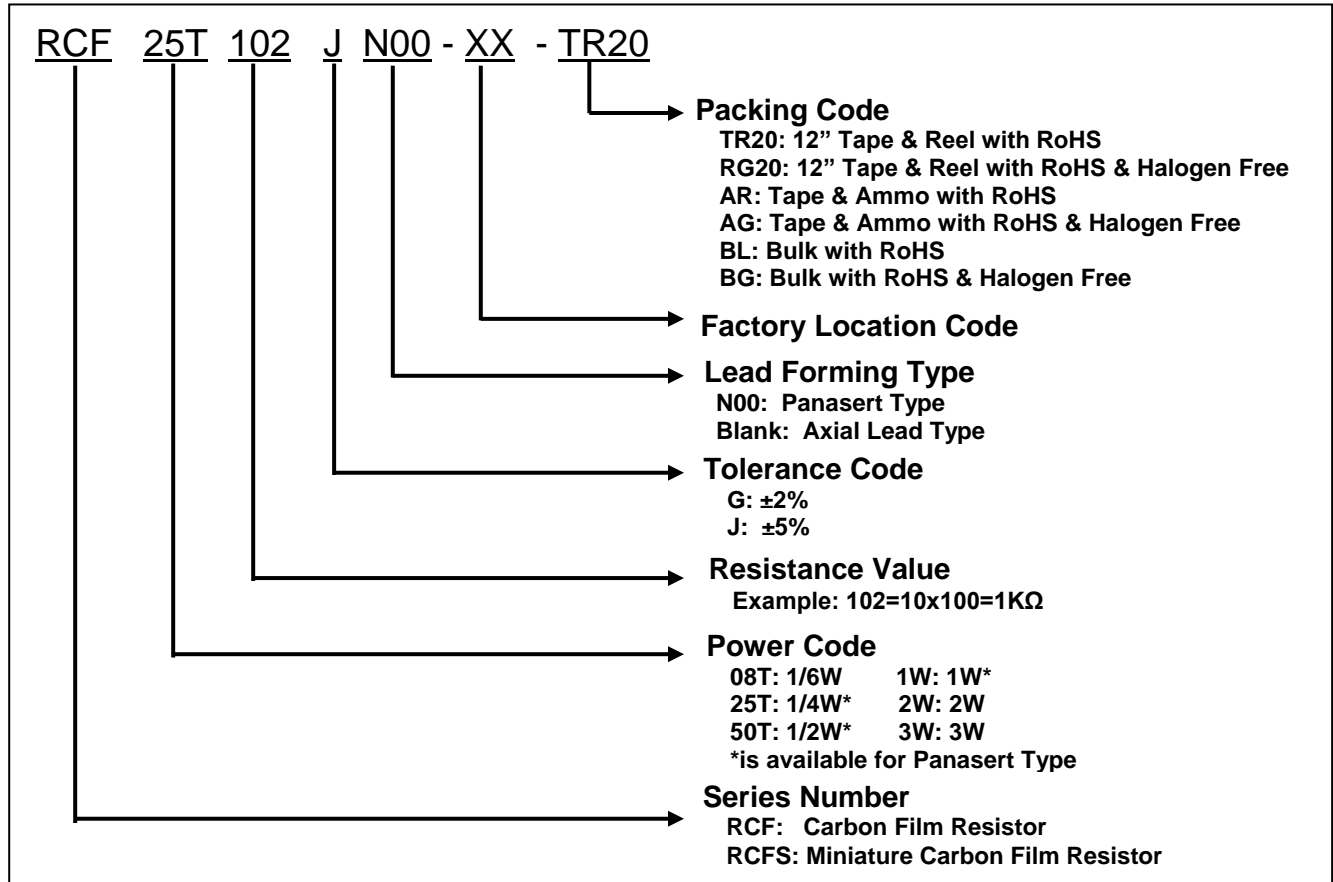
#### Ammo Pack Information

Outline	Inner Box Qty. (pcs)	Inner Box Weight (kg)	Carton Qty. (pcs)	Carton Size (LxWxH) (cm)	Carton Weight (kg)
T-25	2,000	0.66	20,000	42x26x25	8
T-50	1,500	0.77	22,500	44x28x36	13

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## RCF & RCFS Series

### How to order:



### How to contact us

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