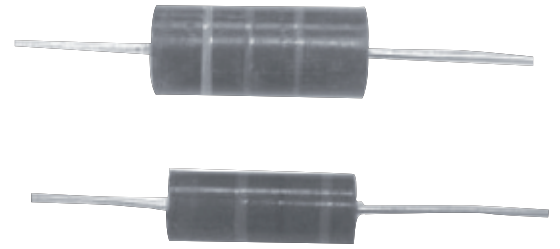


Carbon Composition Resistors

CC Series

- Hot moulded carbon composition
- High pulse voltage and energy capability
- Non-inductive



OBSOLETE

All parts are Pb-free and comply with EU Directive 2011/65/EU amended by (EU) 2015/863 (RoHS3)

Electrical Data

		CC1	CC2
Power rating at 25°C	watts	1	2
Resistance range	ohms	100R – 50K	100R – 10K
Maximum pulse voltage	volts	See pulse graphs	
TCR (20 to 70°C)	ppm/ °C	< ±1000	
Resistance Tolerance	%	10 or 20 *	
Standard Values		E12	
Ambient temperature range	°C	-55 to 125	
Thermal Impedance	°C/watt	51	28

* Tolerance applies to date of manufacture. As in all carbon composition parts value drift in storage is possible. This is typically ±3% in one year and ±5% in 2 years.

Physical Data

Type	Dimensions (mm) & Weight (g)					
	L	D	d	f	Wt. nom.	
CC1	15 +1.5/-0.5	6 +0.2/-0.1	0.8 ±0.05	28 ±1	1.1	
CC2	18 +1.5/-0.5	8 +0.2/-0.1	1.0 ±0.05	28 ±1	2.4	

Construction

CC series resistors are produced using a hot moulded carbon composition material which is varied to produce the required resistance value. The leads are moulded into the resistor. Finally these are coated and band marked.

Marking

CC series resistors are colour coded. Resistors with 20% tolerance have three bands indicating value, and resistors with 10% tolerance have four bands indicating value and tolerance in accordance with IEC62.

Solvent Resistance

The body protection and marking are resistant to all normal industrial cleaning solvents suitable for printed circuits.

General Note

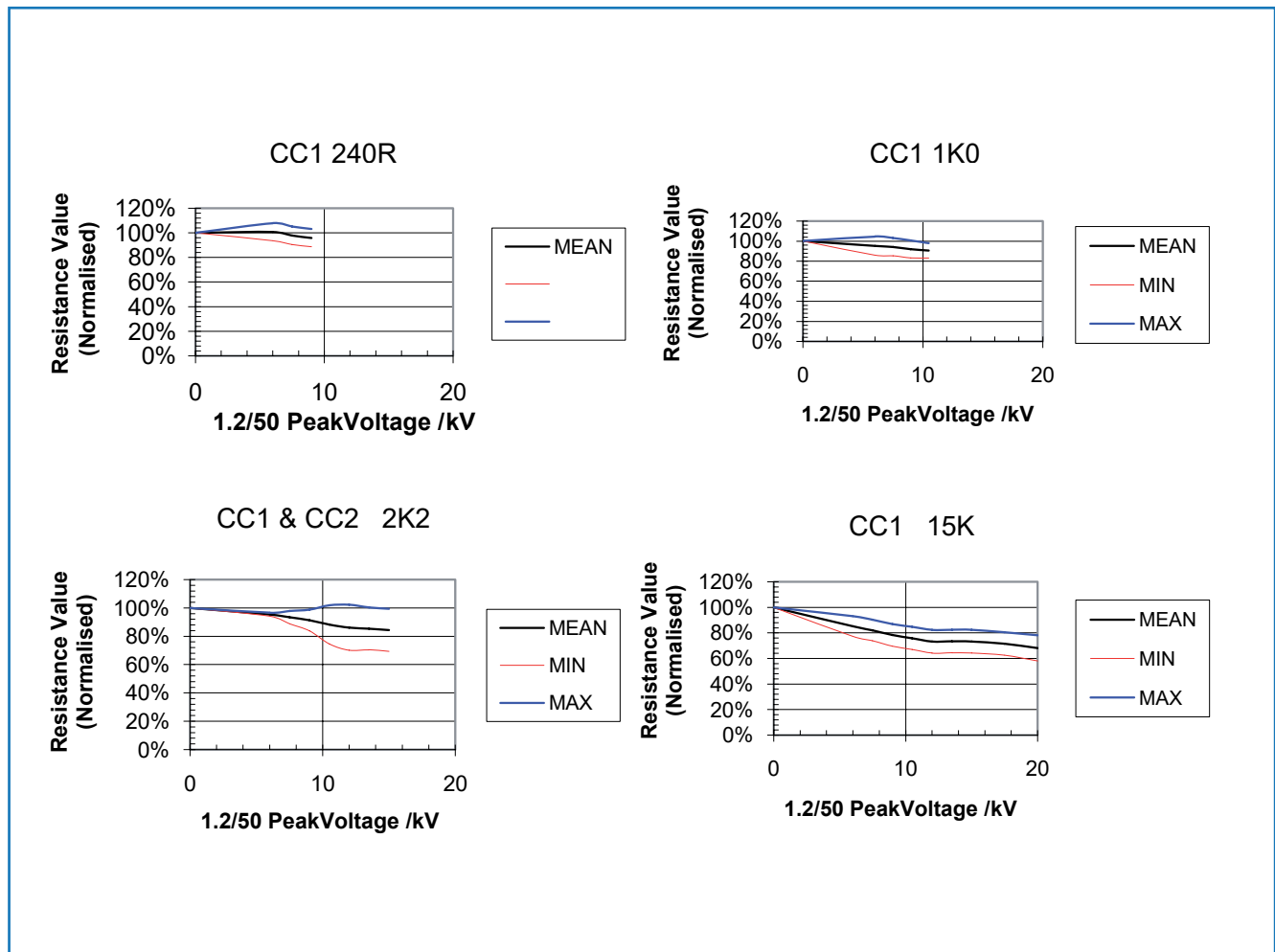
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Performance Data

		Typical
Load at rated power 1000hrs @ 25°C	±ΔR%	8
Dry heat 1000hrs @ 125°C	±ΔR%	8
Long Pulse 100ms at 60 x Rated Power	±ΔR%	2
Short term overload 2s at 6.25 x Rated Power	±ΔR%	2
Derating from rated power @ 25°C		Zero at 125°C
Climatic sequence	±ΔR%	8
Vibration	±ΔR%	2
Temperature rapid change	±ΔR%	2
Resistance to solder heat	±ΔR%	2
Isolation voltage	V	500V

Pulse Performance

The graphs below show the value changes resulting from applying multiple pulses of increasing peak voltage. The pulse shape was 1.2/50μS as defined in IEC 6100-4-5 / ANSI C62.41. The highest voltage plotted on each graph represents the maximum peak voltage for that resistance value.

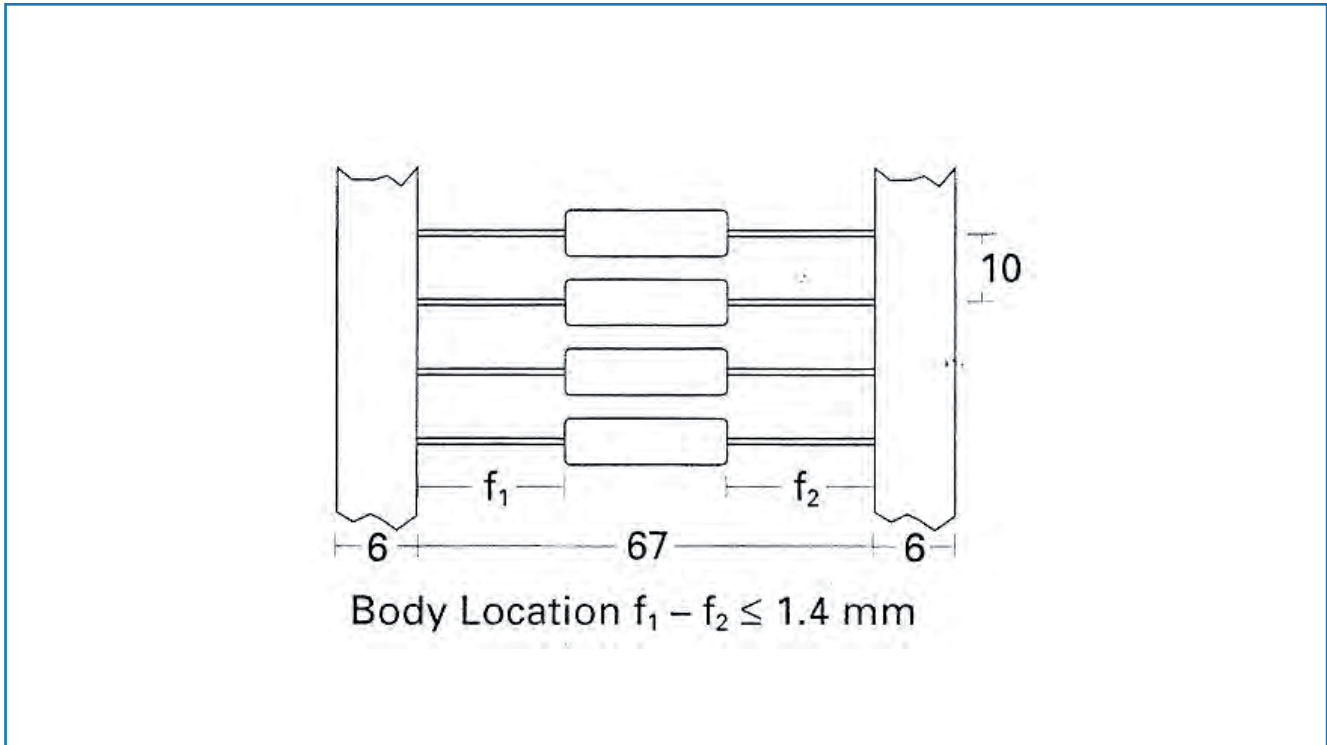


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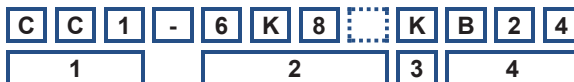
Packaging

Parts are supplied as standard loose packed in boxes. Quantity per box: 2400 (CC1) & 1200 (CC2). CC1 can be supplied by special request tape packed as shown and on a reel. Quantity per reel: 960.



Ordering Procedure

Example: CC1-6K8KB24 (CC1, 6.8 kilohms $\pm 10\%$, Pb-free)



1 Type	2 Value	3 Tolerance	4 Packing & Finish		
CC1	E12 = 3/4 characters	K = $\pm 10\%$	Bulk pack, Pb-free		
CC2	R = ohms K = kilohms	M = $\pm 20\%$	B24	CC1	2400/box
			B12	CC2	1200/box

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