

Power Wirewound Resistors  
flame retardant, safety version



### Specifications

Type		CRF251-4	CRF252-4	CRF253-4	CRF254-4	CRF256-4	CRF257-4
Nominal Power rating $P_{40}$ $P_{70}$	W	1,1 1,0	2,0 1,6	2,5 2,0	3,0 2,5	4,0 3,5	5,0 4,3
Resistance range	$\Omega$	see next page ( higher values upon request )					
E-Series		E 24					
Tolerances	%	$\pm 5$					
Temperature coefficient	$10^{-6} * K^{-1}$	$120 \pm 50$					
max. cont. work. voltage	$V_{RMS}$	$\sqrt{P_{70} \cdot R}$					
Insulation voltage (1min.)	$V_{RMS}$	max 75V					
Insulation resistance		not insulated					
Derating linear	$^{\circ}C$	70 ... 350 (0W)					
Climatic category	$\Omega$	55/350/56					
Temperature range	$^{\circ}C$	- 55 ... 350					
Thermal resistance	$KW^{-1}$	125	100	85	65	65	48
Failure rate (Total, $J_o$ , max., 60% conf. lev.)	$10^{-9} * h^{-1}$	appr. 10, depends on value					
Endurance ( $P_{70}$ , $70^{\circ}C$ , 1000)	$\left[\frac{DR}{R}\right] \%$	$\pm 5,0$ average					
Damp heat, steady state ( $40^{\circ}C$ , 93% r.h., 56d)	$\left[\frac{DR}{R}\right] \%$	$\pm 5,0$					
Climatic sequence	$\left[\frac{DR}{R}\right] \%$	$\pm 2,0$					
Terminal strength	$\left[\frac{DR}{R}\right] \%$	$\pm 0,2$					
Terminal tensile strength	N	40		50			
Resistance to soldering heat ( $260^{\circ}C$ , 10s)	$\left[\frac{DR}{R}\right] \%$	$\pm 0,5$					
Solderability	s	2,5 Flowtime, solderglobule test, IEC 60068-2-20					
Marking		printed in clear					

Type	Resistance range	
	min.	max.
CRF251-4	*1R0	100R
CRF252-4	*1R0	240R
CRF253-4	*1R0	330R
CRF254-4	*1R0	330R
CRF256-4	*1R0	330R
CRF257-4	*1R0	330R

Note: The special construction of resistance values >10R results in an immediate interruption (<1s, 200ms typical) when mains voltage (220V/240V<sub>RMS</sub>) is applied. No flames, no explosion. After fusing, the resistance value is >100KOhm.

For other voltages test suitability in the application!

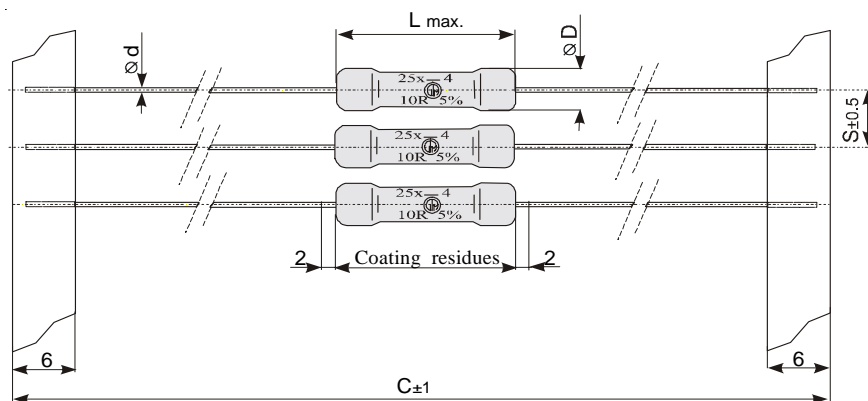
\* Resistance values < 10R are flame retardant.

The interruption mechanism is not clearly defined and has to be tested in the final application!

Type	L max.	ØD max.	Ød
CRF251-4	9,0	3,0	0,65
CRF252-4	9,7	4,0	0,80
CRF253-4	14,5	4,5	0,65
CRF254-4	12,6	6,0	0,80
CRF256-4	17,0	6,0	0,80
CRF257-4	18,0	8,5	0,80

\*R <10R Dmax. +1

Dimensions in mm:



Packaging:

Type	Packaging	Pieces	Code	C	S
CRF251-4	taped/Ammopack	1000	T	65	5
CRF252-4	taped/Ammopack	1000	T	65	5
CRF253-4	taped/Ammopack	1000	T	85	10
CRF254-4	taped/Ammopack	1000	T	85	10
CRF256-4	taped/Ammopack	1000	T	85	10
CRF257-4	taped/Ammopack	500	T	85	10

Ordering example: CRF254-4      5      T      15R  
 Type      Tolerance      Pack.-Code      R-Value

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