

Precision Power Wirewound Resistors
Axial, Ceramic core, Pulse version
Flame retardant coating

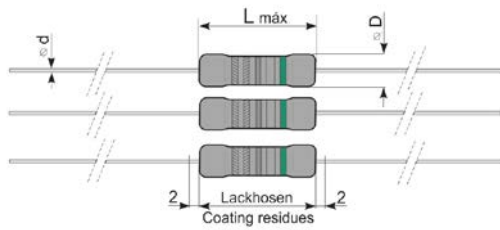
**ELECTRICAL SPECIFICATIONS**

Type			CRP 251-1 (under development)	CRP 252-1	CRP 254-1	CRP 256-1 (under development)	CRP 257-1
<u>Nominal Power rating</u>	P ₄₀ P ₇₀	[W]	1,1 1,0	2,0 1,8	3,0 2,7	4,0 3,6	5,0 4,5
<u>Resistance range</u>		[Ω]	0R1...220R	0R1...470R	0R1...1K8	0R1...1K5	0R1...5K1
<u>E-Series</u>			(Other values upon request)				
<u>Tolerances</u>		± [%]	E24				
<u>Temperature coefficient</u>		[10 ⁻⁶ *K ⁻¹]	Rmin. ...Rmax.: 1, 2, 5; R≥ 1R: 0,5				
<u>Temperature range</u>		[°C]	120 ±50				
<u>Thermal resistance</u>		[KW ⁻¹]	280	155	103	77	62
<u>Dielectric withstanding voltage</u> <i>IEC115-1 clause 4.7 (1[min])</i>		[V]	-55 ... 350				
<u>Max. working voltage</u>		[V] _{RMS}	max 500				
			$\sqrt{P_{70} * R}$				

PERFORMANCE DATA

<u>Derating linear</u>	[°C]	70...350 (0W)
<u>Climatic category</u>		55/200/56
<u>Failure Rate</u> (Total, ϑ_o , max, 60% cont. lev.)	[10 ⁻⁹ h ⁻¹]	appr. 100 depends on value
<u>Endurance</u> <i>IEC60115-1 clause 4.25</i> (P ₇₀ , @ 70[°C], 1000[h])	± [%]	3,0
<u>Damp heat, steady state</u> <i>IEC115-1 clause 4.24</i> (40[°C], 93[% r.h.], 56[d])	± [%]	1,0
<u>Climatic sequence</u> <i>IEC115-1 clause 4.23</i>	± [%]	1,0
<u>Surge test</u> <i>IEC61000-4-5</i>	± [%]	2,0
<u>Terminal strength</u>	± [%]	0,2
<u>Terminal Tensile Strength</u>	[N]	50
<u>Resistance to soldering heat</u> <i>IEC115-1 clause 4.18</i> (260 ^{±5} [°C], 3,5 ^{±1} [s])	± [%]	0,2
<u>Solderability</u> <i>IEC 60068-2-20-T</i> (245 ^{±5} [°C], 3 ^{±0.5} [s])		Solder bath method (> 95% coverage)
<u>Marking</u> <i>IEC60062</i>		Color code ((5th band (green) for pulse version)) (Values<0R1 Printed in clear)

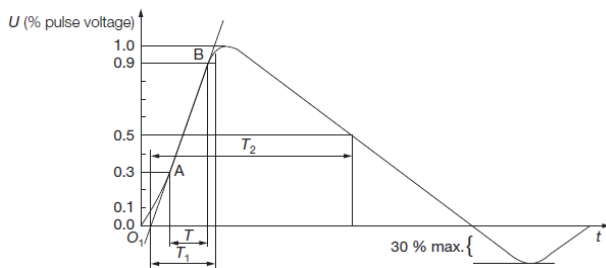
DIMENSIONS [mm]



Type	L max	Ø D max *	Ø d
CRP251-1	9,0	3,0	0,65
CRP252-1	9,7	4,0	0,80
CRP254-1	12,6	5,5	0,80
CRP256-1	17	5,5	0,80
CRP257-1	18,0	8,5	0,80

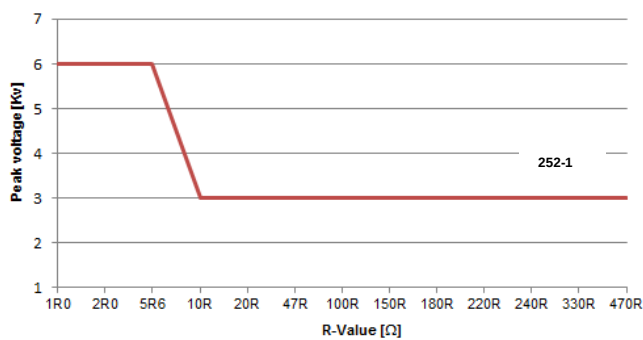
*R ≤ 1R Dmax. +1

PULSE PERFORMANCE

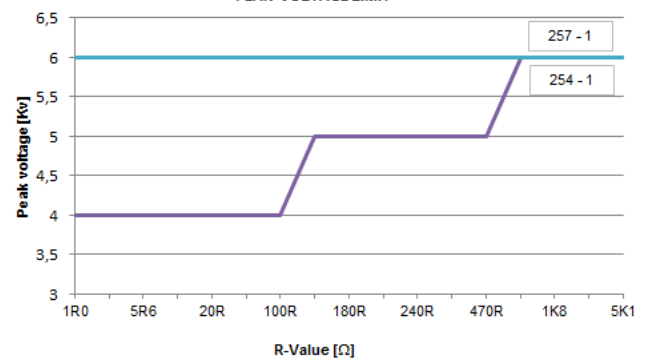


NOTE: The voltage shown in the below table, is the net voltage across the resistor. The generator open voltage will be higher due to the generator's internal impedance (12[Ω]).
Pulse shape – 10 pulses @ 20 [s] interval

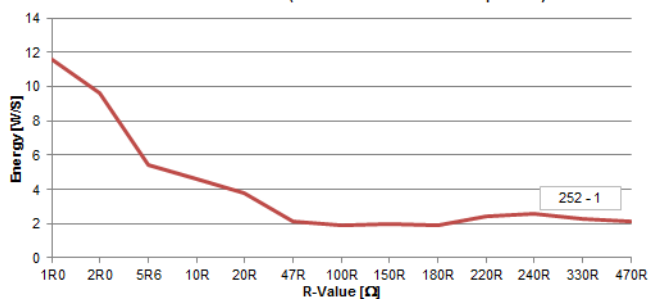
PEAK VOLTAGE LIMIT



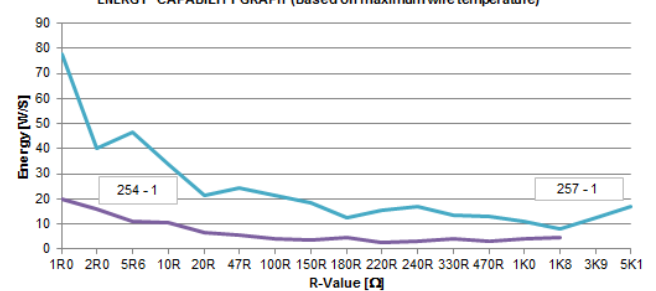
PEAK VOLTAGE LIMIT



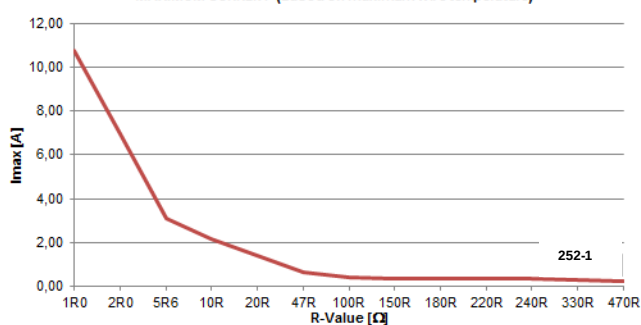
ENERGY CAPABILITY GRAPH (Based on maximum wire temperature)



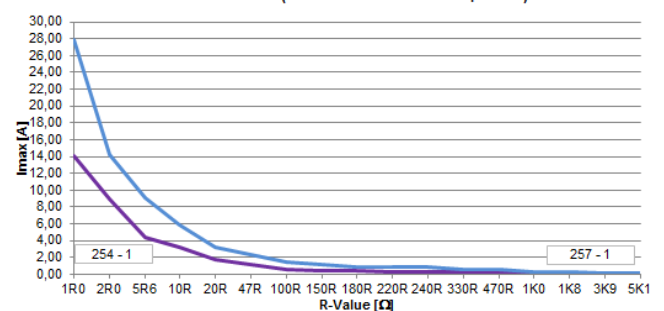
ENERGY CAPABILITY GRAPH (Based on maximum wire temperature)

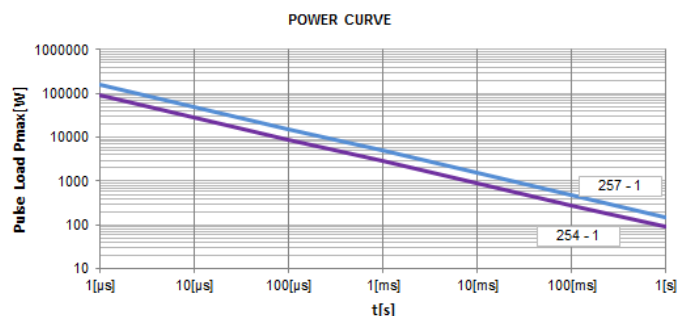
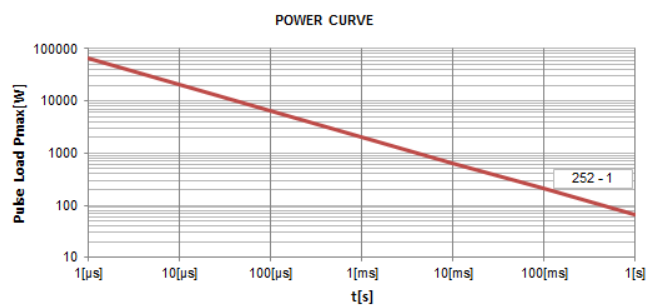


MAXIMUM CURRENT (Based on maximum wire temperature)



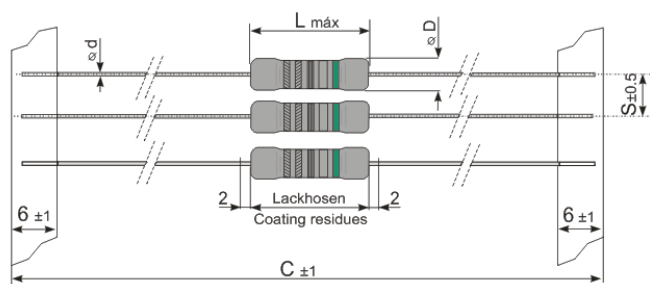
MAXIMUM CURRENT (Based on maximum wire temperature)





PACKAGING

The standard packaging for CRP in axial type is taped, dimensions below.



Type	Packaging	Pieces	Pack. Code	C	s
CRP251-1	Taped / Ammo pack	1000	T	65	5
CRP252-1		1000		65	5
CRP254-1		1000		85	10
CRP256-1		1000		85	10
CRP257-1		500		85	10

ALTERNATIVE LEAD CONFIGURATIONS

This type CRP, is also available in a different pre-forming, as shown below, other's upon request.

SMD VERSION

Z – form



Please check the details here [Series RZ1](#)

THROUGH HOLE VERSION

Radial	Radial Kink	Axial	Axial Kink

*For horizontal and vertical pre-forming please consult your local sales contact.

ORDERING EXAMPLE

CRP254-1	5	T	150R
Type	Tolerance	Pack-Code	R-Value