

# **Type ROX Series**



The resistive element comprises a metal oxide film deposited on a ceramic former. The element is protected by a flameproof coating which will withstand overload conditions without flame or mechanical damage. They are recommended for use in applications such as line protection etc...

### **Key Features**

- High Power with Small Size for Space Saving
- Excellent Long Term Stability
- Complete Flameproof Construction
- High Surge/Overload Capability
- Controlled Temperature Capability
- Solvent Resistant Coat and Code
- Special Lead Formations Possible

# Flame-Proof Power Metal Oxide Film Resistors

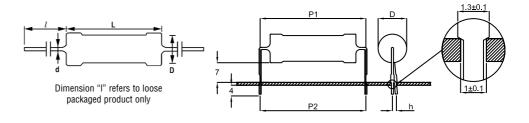


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#### Characteristics - Electrical

	ROX05	ROX1	ROX2	ROX05S	ROX1SS	ROX1S	ROX2S	ROX3S	ROX5S
Rated Power @ 70°C (W)	0.5	1	2	0.5	1	1	2	3	5
Resistance Range (ohms) Min	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Max	330K	470K	560K	100K	200R	270K	470K	560K	560K
Tolerance (%)				2		5			
Code Letter				G		J			
Temperature Coefficient Max (ppm/°C)					± 300				
Selection Series					E24				
Limiting Element Voltage (V)	250	350	350	250	350	350	350	350	500
Maximum Overload Voltage (V)	400	600	600	400	400	600	600	600	800
Max Intermittent Overload Voltage (V)	500	750	750	500	500	750	750	750	1500
Operating Temperature Range (°C)				-	55 to +23	5			
Climatic Category					55/235/56	i			
Dielectric Strength (V)	250	350	350	250	350	350	350	350	500
Insulation Resistance (Mohms)					1,000				

#### **Dimensions**



## Standard Range Leaded

Style	L ±1	D	d nom	l min
ROX05	9	3 ±0.5	0.7	25
ROX1	11	4 ±0.5	0.7	25
ROX2	16	6 ±1	0.8	35

#### "S" Range Leaded

Style	L±1	D ±0.5	d nom	l min
ROX05S	6.5	2.3	0.6	25
ROX1SS	6.5	2.3	0.6	25
ROX1S	9	3	0.7	25
ROX2S	11	4	0.8	25
ROX3S	15	5.5	0.8	35
ROX5S	25 ±2	8.5 ±1	0.8	35

## Standard Range Pre-formed

Style	P1 ±0.5	P2 ±2	H1	H2	h max
ROX05	12.5	12.5	7.5 ±1.5	3.5 ±1	2.0
ROX1	15	15	7.5 ±1.5	3.5 ±1	2.0
ROX2	20	20	7.5 ±2.0	3.5 ±1	3.0

#### "S" Range Pre-formed

Style	P1 ±0.5	P2 ±2	H1	H2	h max
ROX05S	10	10	7.5 ±1.5	3.5 ±1	2.0
ROX1SS	10	10	7.5 ±1.5	3.5 ±1	2.0
ROX1S	12.5	12.5	7.5 ±0.5	3.5 ±1	2.0
ROX2S	15	15	7.5 ±1.5	3.5 ±1	2.9
ROX3S	20	20	7.5 ±2.0	3.5 ±1	3.0
ROX5S	30	30	7.5 ±2.0	3.5 ±1	3.0

#### Mounting

The resistors are suitable for processing on automatic insertion equipment and cutting and bending machines.

## Marking

The resistors are marked with a four-band colour code in accordance with IEC 62.

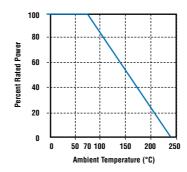


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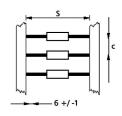
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# **Derating Curve**



# **Packaging**

New Style Reference	Quantity per Ammo Pack	Std tape Spacing *S ±1	Component Spacing c ±0.5
R0X05	2,000	52	5
R0X1	1,000	52	5
R0X2	1,000	63	10
ROX05S	2,000	52	5
R0X1SS	2,000	52	5
R0X1S	2,000	52	5
R0X2S	1,000	52	5
R0X3S	1,000	63	10
R0X5S	500	63	10



### **Performance Characteristics**

The evaluation of the performance characteristics is carried out with reference to IEC Specifications QC 400 000 and QC 400 100.

TEST REF	Long Term Tests ± (5% + 0.1 ohm)
4.23	Climatic sequence
4.24	Damp heat, steady state
4.25.1	Endurance at 70 °C
4.25.3	Endurance at 235 °C
TEST REF	Short Term Tests ± (1% + 0.05 ohm)
4.13	Overload
4.16	Robustness of terminations
4.18	Resistance to soldering heat
4.19	Rapid change of temperature
4.22	Vibration



<sup>\*</sup> Other tape spacings available on request Other packaging styles are available on request