

## Type ROX Series

### 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



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...

### Characteristics - Electrical

	ROX05	ROX1	ROX2	ROX05S	ROX1SS	ROX1S	ROX2S	ROX3S	ROX5S
<b>Rated Power @ 70°C (W):</b>	0.5	1	2	0.5	1	1	2	3	5
<b>Resistance Range (ohms) Min:</b>	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
<b>Max:</b>	330K	470K	560K	100K	200R	270K	470K	560K	560K
<b>Tolerance and Code Letter:</b>	2% (G) / 5% (J) 1% (F) available on request								
<b>Temp. Coefficient Max (ppm/°C):</b>	± 350								
<b>Selection Series:</b>	E24								
<b>Limiting Element Voltage (V):</b>	250	350	350	250	350	350	350	350	500
<b>Maximum Overload Voltage (V):</b>	400	600	600	400	400	600	600	600	800
<b>Max Intermittent Overload Voltage (V):</b>	500	750	750	500	500	750	750	750	1500
<b>Operating Temp. Range (°C):</b>	-55 to +155								
<b>Climatic Category:</b>	55/155/42								
<b>Dielectric Strength (V):</b>	250	350	350	250	350	350	350	350	500
<b>Insulation Resistance (Mohms):</b>	1,000								

### 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. Grey base colour for Standard Range, Sea Blue colour for "S" Range.

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### Dimensions



#### Standard Range Leaded

Style	D max	L Max	l±/3	d±/-0.05
ROX05	3.5	10	28	0.54
ROX1	5	12	25	0.7
ROX2	5.5	16	28	0.7

#### 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 Leaded

Style	D max	L Max	l±/3	d±/-0.05
ROX05S	2.5	7.5	28	0.54
ROX1SS	2.5	7.5	28	0.54
ROX1S	3.5	10	28	0.7
ROX2S	5	12	25	0.7
ROX3S	5.5	16	28	0.7
ROX5S	8	25	38	0.75

#### "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

### Power Derating Curve



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### Packaging



New Style Reference	Quantity per Ammo Pack	Std tape Spacing *S ±1	Component Spacing c ±0.5
ROX05	2,000	52	5
ROX1	1,000	52	5
ROX2	1,000	63	10
ROX05S	2,000	52	5
ROX1SS	2,000	52	5
ROX1S	2,000	52	5
ROX2S	1,000	52	5
ROX3S	1,000	63	10
ROX5S	500	63	10

\* Other tape spacings available on request  
Other packaging styles are available on request

### 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

### Heat Rise Chart



### How to Order

ROX	1	J	100R	BL
Common Part	Style	Tolerance	Value	Preform
ROX - Flame-Proof Power Metal Oxide Film Resistor	1 - 1S 2 - 2S 3 - 3S	G - 2% J - 5% (F - 1% available on request)	100 ohm (100 ohms) 100R 1K0 (1000 ohms) 1K0 100 K ohm (100,000 ohms) 100K	BL - Preformed Leads

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