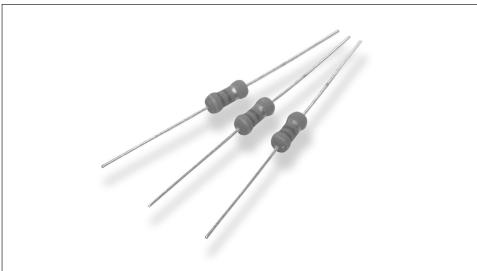


#### '

#### **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

# **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...

#### **Characteristics - Electrical**

	ROXO5	ROX1	ROX2	ROXO5S	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 and Code Letter:			2% (G)	/ 5% (J)	1% (F)	available	on requ	est	
Temp. Coefficient Max (ppm/°C):					± 350				
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 Temp. Range (°C):	-55 to +155								
Climatic Category:					55/155/42	2			
Dielectric Strength (V):	250	350	350	250	350	350	350	350	500
Insulation Resistance (Mohms):					1,000				

#### Mounting

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

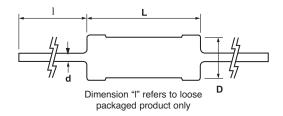
#### **Marking**

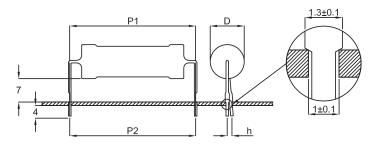
The resistors are marked with a four-band colour code in accordance with IEC 62. Grey base colour for Standard Range, Sea Blue colour for "S" Range.



# **Type ROX Series**

#### **Dimensions**





#### **Standard Range Leaded**

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

## "S" Range Leaded

Style	D max	L Max	I+/-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

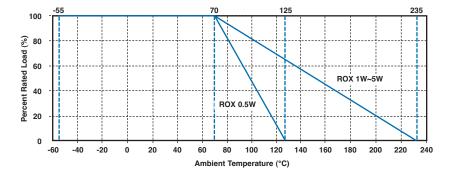
#### **Standard Range Pre-formed**

Style	P1 ±0.5	P2 ±2	H1	H2	h max
ROXO5	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
ROXO5S	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

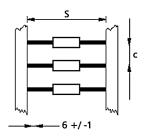
# **Power Derating Curve**





# **Type ROX Series**

#### **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

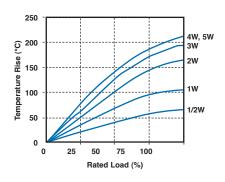
Other tape spacings available on request
 Other packaging styles are available on request

#### **Performance Characteristics**

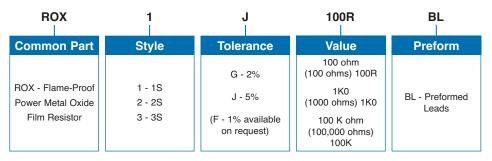
The evaluation of the performance characteristics is carried out with reference to IEC Specifications QC 400 000 and QC 400 100.

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**



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# **Mouser Electronics**

**Authorized Distributor** 

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# TE Connectivity:

 ROX1SJ15R
 ROX1SJ820R
 ROX2SJ1R2
 ROX1SJ220K
 ROX1SJ47K
 ROX2SJ68K
 ROX1SJ1M0
 ROX2SJ2R2

 ROX2SJ1R8
 ROX1SJ39R
 ROX1SJ56R
 ROX1SJ1K8
 ROX2SJ680R
 ROX1SJ18K
 ROX2SJ12K
 ROX2SJ220K

 ROX2SJ3R9
 ROX1SJ15K
 ROX2SJ560R
 ROX2SJ12R
 ROX2SJ6R8
 ROX1SJ6R8
 ROX2SJ120K
 ROX2SJ150K

 ROX2SJ390R
 ROX1SJ100K