

# Surge arrester

2-electrode arrester

Series/Type: **EM150X** 

Ordering code: B88069X5921\*\*\*\*

2019-07-15 Date:

Version: 03

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# 2-electrode arrester EM150X

#### **Features**

- Small size
- Fast response time
- High current handling capability
- Stable performance over service life
- Low capacitance and insertion loss
- High insulation resistance
- RoHS-compatible

# **Applications**

- Power supplies
- Antenna protection
- Air condition
- Modem
- Consumer electronics
- Dataline protection

# **Electrical specifications**

	0/		
DC spark-over voltage 1)	2)	150	V
Tolerance		±20	%
Min.		120	V
Max.		180	V
Impulse spark-over volta	ge		
at 100 V/μs -	for 99% of measured values	< 450	V
·	typical values of distribution	< 400	V
at 1 kV/μs -	for 99% of measured values	< 600	V
-	typical values of distribution	< 550	V
Service life			
10 operations	50 Hz, 1 s	2.5	Α
1 operation	50 Hz, 0.18 s (9 cycles)	5	Α
10 operations	8/20 μs	2.5	kA
1 operation	8/20 µs	5	kA
Insulation resistance at 100 V <sub>DC</sub>		> 1	GΩ
Capacitance at 1 MHz		< 1	pF
Arc voltage at 1 A	~ 10	V	
Glow to arc transition cur	< 0.3	Α	
Glow voltage	~ 60	V	
Weight		~ 1	g
Operation and storage to	-40 +125	°C	
Climatic category (IEC 60068-1)		40/125/21	1
Marking, red positive		EPCOS EM 150 YY O  EM - Series 150 - Nominal voltage YY - Year of production O - Non radioactive	

<sup>1)</sup> At delivery AQL 0.65 level II, DIN ISO 2859

Terms in accordance with ITU-T Rec. K. 12 and IEC 61643-311.

PPD AB PD / PPD AB PM

<sup>2)</sup> In ionized mode

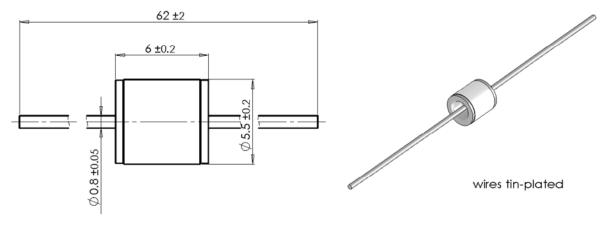


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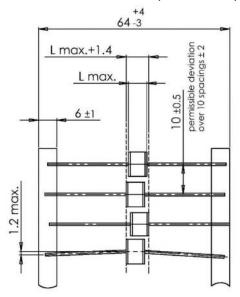
**EM150X** 

# Dimensional drawing in mm

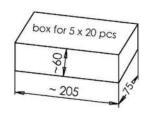


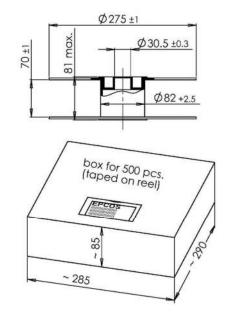
# Ordering codes and packing advices

B88069X5921**S102** = 100 pcs. on 5 taped stripes B88069X5921**T502** = 500 pcs. on tape and reel



tape acc. to IEC 60286-1





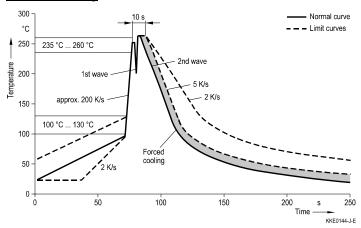


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#### 2-electrode arrester EM150X

#### Soldering parameter

#### Wave soldering



Wave profile features	Pb-free assembly	
Solder	Sn 95.5 / Ag 3.8 / Cu 0.7	
Solder bath temperature	263 (±3) °C	
Dwell time	< 3 s	

Soldering profile applied to a single soldering process.

#### **Cautions and warnings**

- Do not operate surge arresters in power supply networks, whose maximum operating voltage exceeds the minimum spark-over voltage of the surge arresters.
- Surge arresters may become hot in the event of longer periods of current stress (burn risk). In the
  event of overload the connectors may fail or the component may be destroyed.
- If the contacts of the surge arresters are defective, current load can cause sparks and loud noises.
- Surge arresters must be handled with care and must not be dropped.
- Do not continue to use damaged surge arresters.

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# Important notes

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