

# **ADC**

# High voltage 1/4" x 1-1/4" fast-acting ceramic tube fuse



#### **Product features**

- · High voltage ceramic tube fuse
- Compact 3AB footprint:
   ¼" x 1 ¼" (6.3 x 32 mm)
- Fast-acting performance
- 500 Vac/Vdc rating
- Cartridge and axial lead versions available
- Very high interrupting ratings to help safely protect against dangerous high fault currents
- Fuse accessories (cartridge version):
   HVP Panel mount fuse holder (480V)
   HVI In-line fuse holder (600V)
   S-8000 Panel mount fuse block (600V)
   1Axxxx (up to 600V) fuse clips

#### **Agency information**

• cURus Recognition file: E19180



#### **Applications**

- · Industrial control panels
- Motor control UL 508A panels
- Uninterruptible power supplies (UPS)
- Variable frequency drives
- Energy storage and battery systems
- · High voltage power conversion

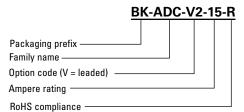
#### **Environmental compliance**







# Ordering part number



#### **Packaging prefix**

 BK-100 pieces in polybag

#### Option code

-V2

Axial leads with 50.8 length– copper tinned wire with nickel plated brass over caps



#### **Electrical characteristics**

Amp Rating	1.5 In maximum	2.0 In maximum	3.0 In maximum	
12 A - 30 A	30 minutes	5 minutes	10 seconds	

# **Product specifications**

<b>D</b>	Current rating	Voltage rating	voltage	rating @ rated	Typical resistance <sup>1</sup>	Typical voltage drop <sup>3</sup>	Typical melting <sup>2</sup>
Part number	(A)	(Vac/Vdc)	(A) Vac (A) Vdc (mΩ)	(mΩ)	(mV)	I <sup>2</sup> t (A <sup>2</sup> s)	
ADC-12-R	12	500	30 KA @ 500	20 KA @ 500	12.3	310	120
ADC-15-R	15	500	30 KA @ 500	20 KA @ 500	8.0	205	50
ADC-20-R	20	500	30 KA @ 500	20 KA @ 500	5.5	210	88
ADC-25-R	25	500	30 KA @ 500	20 KA @ 500	4.6	245	125
ADC-30-R	30	500	30 KA @ 500	20 KA @ 500	3.7	255	270

<sup>1.</sup> ypical resistance measured at <10% of ra09Mance measured at <10

#### **General specifications**

Operating temperature: -50 °C to +125 °C with proper correction factor applied

Terminal strength: MIL-STD-202G, Method 211A, Test Condition A, Pull force 10N/10S

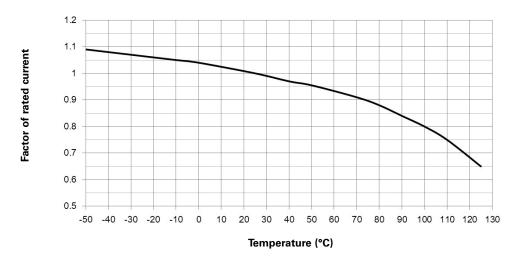
Thermal shock: MIL-STD-202, Method 107G: -65 °C to +125 °C, 5 cycles

Mechanical vibration: MIL-STD-202 Method 201

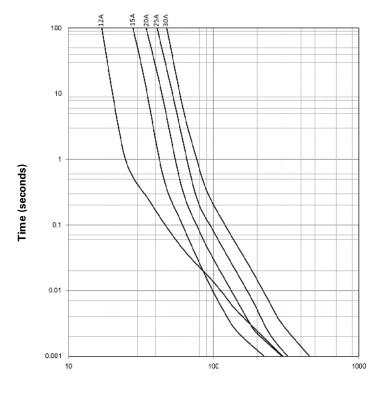
Humidity: MIL-STD-202G, Method 103B, Test Condition A: 95% RH, +40 °C, 240 hours

Solderability: MIL-STD-202 Method 208

### Temperature derating curve

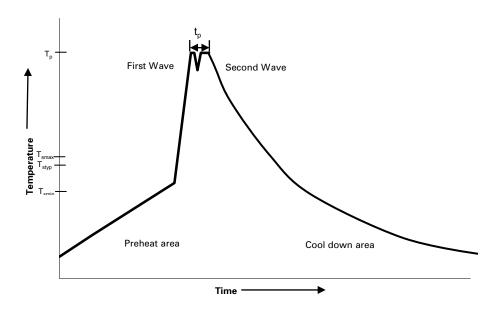


#### Time vs. current curve



Current (A)

# Wave solder profile (Axial lead only)



#### Reference EN 61760-1:2006

Profile feature		Standard SnPb solder	Lead (Pb) free solder	
Preheat	• Temperature min. (T <sub>smin</sub> )	100 °C	100 °C	
	• Temperature typ. (T <sub>styp</sub> )	120 °C	120 °C	
	• Temperature max. (T <sub>smax</sub> )	130 °C	130 °C	
	Time (T <sub>smin</sub> to T <sub>smax</sub> ) (t <sub>s</sub> )	70 seconds	70 seconds	
$\Delta$ preheat to	max Temperature	150 °C max.	150 °C max.	
Peak tempera	ature (Tp)*	235 °C − 260 °C	250 °C − 260 °C	
Time at peak	temperature (t <sub>p</sub> )	10 seconds max 5 seconds max each wave	10 seconds max 5 seconds max each wave	
Ramp-down r	rate	~ 2 K/s min ~3.5 K/s typ ~5 K/s max	~ 2 K/s min ~3.5 K/s typ ~5 K/s max	
Time 25 °C to 25 °C		4 minutes	4 minutes	

#### Manual solder

+350 °C (4-5 seconds by soldering iron), generally manual/hand soldering is not recommended.

Life Support Policy: Eaton does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.

Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this bulletin.

Eaton
Electronics Division

1000 Eaton Boulevard Cleveland, OH 44122 United States Eaton.com/electronics

© 2021 Eaton All Rights Reserved Printed in USA Publication No. ELX1122 BU-ELX21130 December 2021

Eaton is a registered trademark.

All other trademarks are property of their respective owners.

