

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

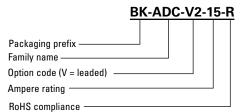
Environmental compliance







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

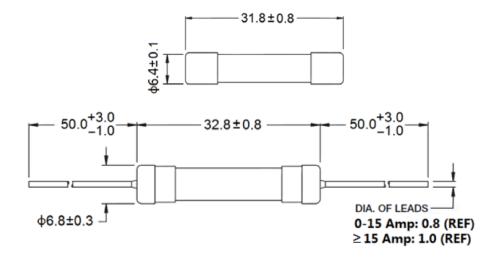
Product specifications

	Current rating	Voltage rating	Interrupting i voltage	rating @ rated	Typical resistance ¹	Typical voltage drop³	Typical melting ²
Part number	(A)	(Vac/Vdc)	(A) Vac	(A) Vdc	(mΩ)	(mV)	I²t (A²s)
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

- 1. Typical resistance measured at <10% of rated current at +25 $^{\circ}\text{C}$
- 2. Typical melting l²t measured at 10x of rated current
- 3. Typical voltage drop measured at +25 °C and rated current

Dimensions- mm

Drawing not to scale



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

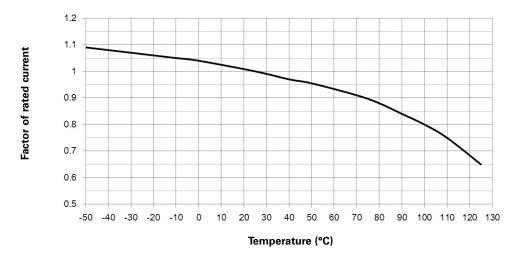
Thermal shock: MIL-STD-202, Method 107G: -65 °C to +125 °C, 5 cycles

Mechanical vibration: MIL-STD-202 Method 201

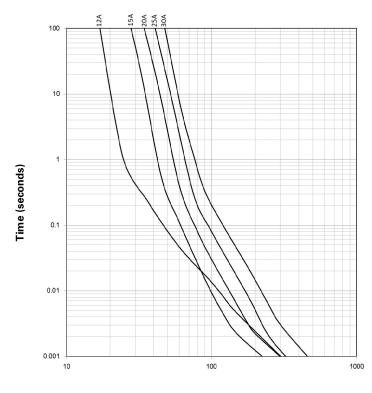
Humidity: MIL-STD-202G, Method 103B, Test Condition A: 95% RH, +40 °C, 240 hours

Solderability: MIL-STD-202 Method 208

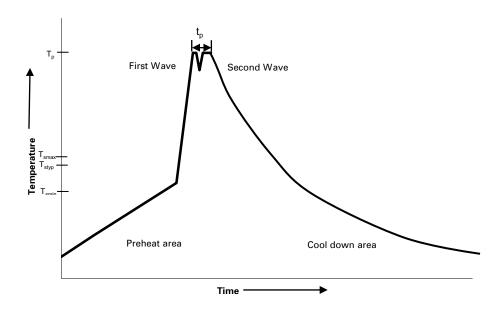
Temperature derating curve



Time vs. current curve



Wave solder profile (Axial lead only)



Reference EN 61760-1:2006

Profile feature		Standard SnPb solder	Lead (Pb) free solder	
Preheat	• Temperature min. (T _{smin})	100 °C	100 °C	
	• Temperature typ. (T _{styp})	120 °C	120 °C	
	• Temperature max. (T _{smax})	130 °C	130 °C	
-	Time (T _{smin} to T _{smax}) (t _s)	70 seconds	70 seconds	
Δ 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 _p)	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.

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