

CAK3-012C
THRU
CAK3-380C



SILICON BI-DIRECTIONAL
GLASS PASSIVATED JUNCTION
TRANSIENT VOLTAGE SUPPRESSORS
3kA, 12 THRU 380 VOLT



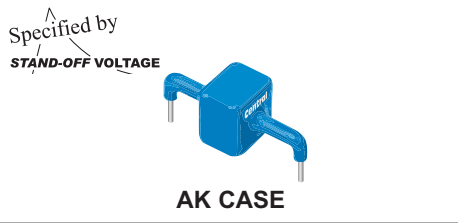
www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CAK3-012C series devices are bi-directional glass passivated junction Transient Voltage Suppressors designed to protect voltage sensitive components from high voltage transients.

THIS DEVICE IS MANUFACTURED WITH A GLASS PASSIVATED CHIP FOR OPTIMUM RELIABILITY.

MARKING CODE: FULL PART NUMBER



FEATURES:

- Very low clamping voltage
- Bi-directional
- ESD protection of data lines in accordance with IEC 61000-4-2

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

Peak Pulse Current (IEC 61000-4-5) (8x20 μs)
ESD Voltage (IEC 61000-4-2, Air)
ESD Voltage (IEC 61000-4-2, Contact)
Operating Junction Temperature
Storage Temperature

SYMBOL


I_{PP} 3
 V_{ESD} 15
 V_{ESD} 8
 T_J -55 to +125
 T_{stg} -55 to +150

UNITS

kA
kV
kV
 $^\circ\text{C}$
 $^\circ\text{C}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

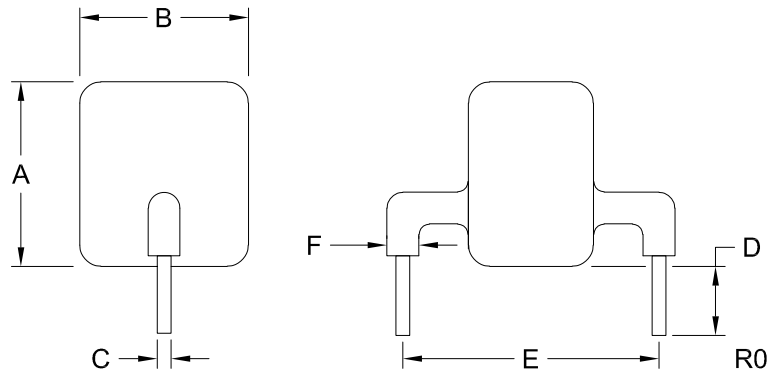
Type	Maximum Reverse Stand-off Voltage		Minimum Breakdown Voltage	Test Current	Maximum Reverse Leakage Current	Maximum Clamping Voltage (8x20 μs)
	V_{RMS}	V_{RWM}	$V_{BR} @ I_T$	I_T	$I_R @ V_{RWM}$	$V_C @ 3kA$
	V	V	V	mA	μA	V
CAK3-012C	8.5	12.8	14	10	20	28
CAK3-015C	11	15	17	10	20	30
CAK3-020C	14	20	22	10	20	40
CAK3-025C	17	25	28	10	20	50
CAK3-030C	21	30	33	10	20	90
CAK3-042C	30	42	47	10	20	100
CAK3-058C	40	58	64	10	20	110
CAK3-076C	54	76	85	10	20	140
CAK3-380C	275	380	401	10	20	520

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AK CASE - MECHANICAL OUTLINE



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	-	0.685	-	17.40
B	-	0.626	-	15.90
C (DIA)	0.047	0.055	1.20	1.40
D	0.256	0.295	6.50	7.50
E	0.923	0.978	23.45	24.85
F (DIA)	-	0.157	-	4.00

AK (REV: R0)

R2 (17-August 2021)

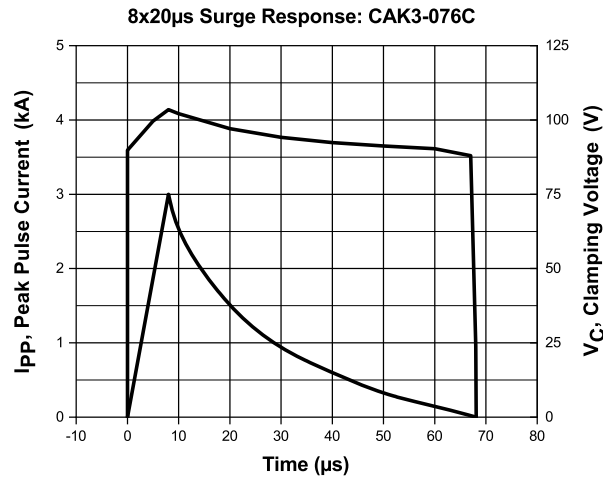
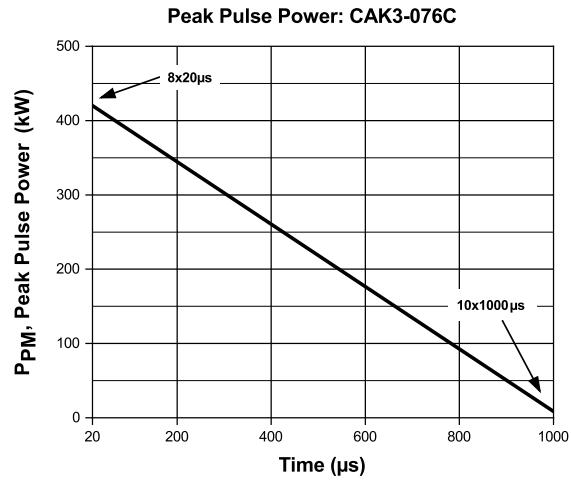
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TYPICAL ELECTRICAL CHARACTERISTICS



R2 (17-August 2021)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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