

<b>71</b> 2	E480232
-------------	---------

#### **Features**

- · Axial Lead Terminals
- · High Current Transient Suppressor
- Excellent Clamping Capability
- · Glass Passivated Junction
- Bi-directional
- Low Slope Resistance
- Repetition Rate(duty cycle):0.01%
- High Temperature Soldering:260°C/10 Seconds at Terminals
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant<sup>(Note 1)</sup> ("P" Suffix Designates Compliant. See Ordering Information)

# **Maximum Ratings**

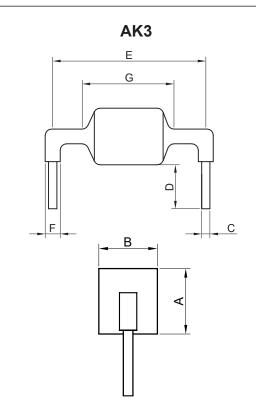
Parameter	Symbol	Value		Unit
Operating Junction Temperature Range	TJ	-55 to +150		°
Storage Temperature Range	T <sub>STG</sub>	-55 to +150		°C
Current Rating,Rated IPP Measured With 8/20us Pulse	Ірр	AK3	3	KA

<sup>1.</sup> High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

# **Internal Structure and Marking Code**

Description	Graphic symbol
Bi-directional	

# AK Series TVS Diodes



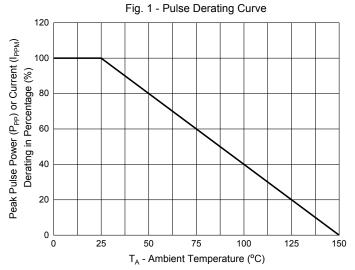
DIM	INC	HES	М	М	NOTE
DIIVI	MIN	MAX	MIN	MAX	NOTE
Α		0.453		11.50	
В	-	0.421		10.70	
С	0.047	0.052	1.20	1.32	
D	0.236	0.296	6.00	7.50	
Е	0.922	0.979	23.43	24.87	
F	0.070	0.158	1.80	4.00	
	0.110	0.228	2.80	5.80	-030C
G	0.177	0.295	4.50	7.50	-058C/-066C/-076C
٦	0.520	0.614	13.20	15.60	-380C
	0.551	0.646	14.00	16.40	-430C

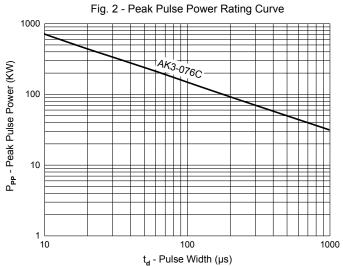


## Electrical Characteristics @ 25°C Unless Otherwise Specified

Part Number	Stand- Off Voltage	Breakdown Voltage		Test Current	Surge Current Rating	Maximum Clamping Voltage	Reverse Leakage	Marking
	V <sub>SO</sub> (V)	V <sub>BR</sub> (V) Min.@I <sub>T</sub>	V <sub>BR</sub> (V) Max.@I <sub>T</sub>	I <sub>T</sub> (mA)	8/20us (KA)	V <sub>C</sub> (V) @I <sub>PP</sub>	I <sub>R</sub> (μΑ) @V <sub>SO</sub>	
AK3-030C	30	32	37	10	3	90	20	AK3030C
AK3-058C	58	64	70	10	3	110	20	AK3058C
AK3-066C	66	70	80	10	3	125	20	AK3066C
AK3-076C	76	85	95	10	3	140	20	AK3076C
AK3-380C	380	401	443	10	3	520	20	AK3380C
AK3-430C	430	440	490	10	3	625	20	AK3430C

#### **Curve Characteristics**







### **Ordering Information**

Device	Packing		
AK3-XXXX-BP	Bulk:150pcs/Box,1800pcs/Carton		

\*\*\*IMPORTANT NOTICE\*\*\*

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. Micro Commercial Components Corp. does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Micro Commercial Components Corp. and all the companies whose products are represented on our website, harmless against all damages. Micro Commercial Components Corp. products are sold subject to the general terms and conditions of commercial sale, as published at

https://www.mccsemi.com/Home/TermsAndConditions.

#### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

#### \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources. MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.