



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	T <sub>J</sub>	-55 to +150		°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150		°C
Current Rating, Rated IPP Measured With 8/20us Pulse	IPP	AK3	3	KA

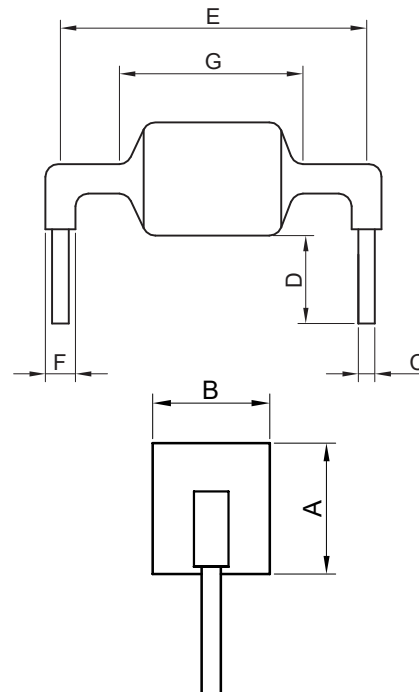
1.High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

## Internal Structure and Marking Code

Description	Graphic symbol
Bi-directional	

## AK Series TVS Diodes

### AK3



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	--	0.453	--	11.50	
B	--	0.421	--	10.70	
C	0.047	0.052	1.20	1.32	
D	0.256	0.296	6.50	7.50	
E	0.922	0.979	23.43	24.87	
F	0.070	0.158	1.80	4.00	
G	0.110	0.228	2.80	5.80	-030C
	0.143	0.262	3.65	6.65	-058C
	0.143	0.262	3.65	6.65	-066C
	0.177	0.295	4.50	7.50	-076C
	0.444	0.563	11.30	14.30	-380C
	0.478	0.597	12.15	15.15	-430C

**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Part Number	Reverse Stand- Off Voltage		Breakdown Voltage		Test Current	Surge Current Rating	Maximum Clamping Voltage	Reverse Leakage	Marking
	V <sub>AC</sub> (V)	V <sub>DC</sub> (V)	V <sub>BR</sub> (V) MIN. @IT	V <sub>BR</sub> (V) MAX. @IT	I <sub>T</sub> (mA)	8/20us (KA)	VC(V) @IPP	IR(μA) @V <sub>DC</sub>	
AK3-030C	20	30	32	37	10	3	90	20	AK3030C
AK3-058C	40	58	64	70	10	3	110	20	AK3058C
AK3-066C	45	66	70	80	10	3	125	20	AK3066C
AK3-076C	54	76	85	95	10	3	140	20	AK3076C
AK3-380C	275	380	401	443	10	3	520	20	AK3380C
AK3-430C	310	430	440	490	10	3	625	20	AK3430C

**Curve Characteristics**

Fig. 1 - Pulse Derating Curve

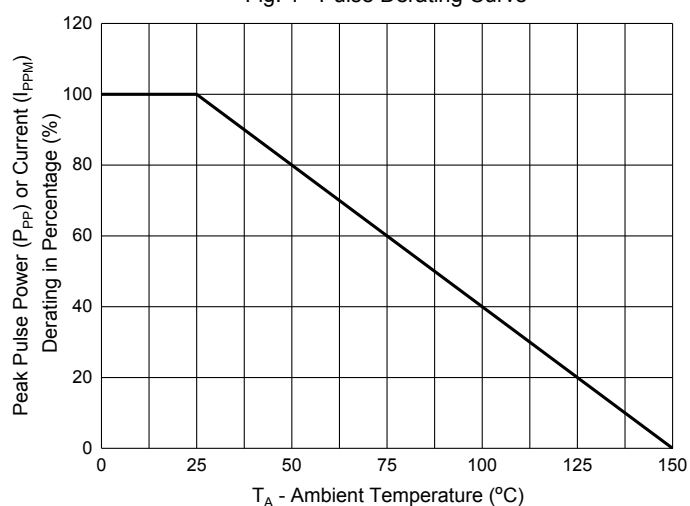
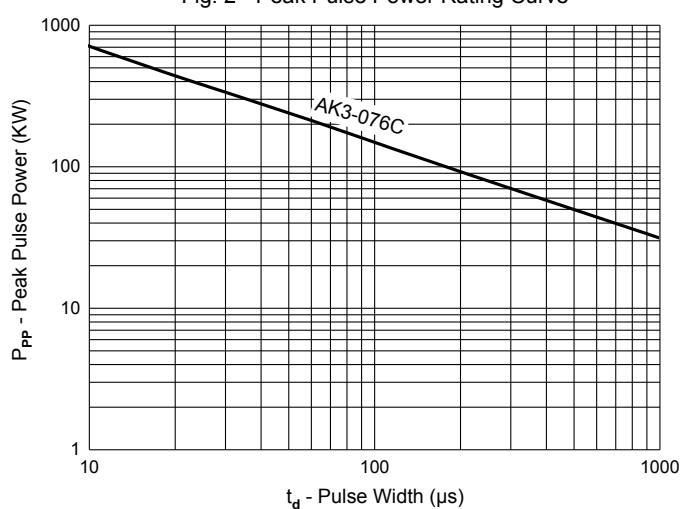


Fig. 2 - Peak Pulse Power Rating Curve



## Ordering Information

Device	Packing
AK3 Series	Bulk: 150pcs/Box, 1800pcs/Carton

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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