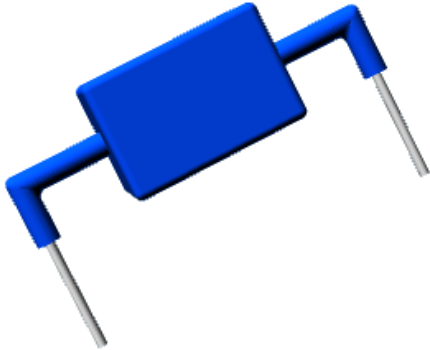


## AK3 Series Transient Voltage Suppressor



### Features

- Ideal for automated placement
- High surge current capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- Bi-directional TVS
- Glass passivated junction
- Excellent Clamping Capability
- Low Slope Resistance

### Typical Applications

- High power DC bus protection

### Mechanical Data

- **Package:** AK  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

### ■ Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Peak pulse current rating per 8/20μs@105°C IEC 61000-4-5	I <sub>pp</sub>	A	3000
Storage temperature	T <sub>stg</sub>	°C	-55 ~+150
Junction temperature	T <sub>j</sub>	°C	-55 ~+150

### ■ Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

Part Number	Breakdown Voltage V <sub>BR</sub> @I <sub>T</sub>			Maximum Reverse Leakage I <sub>R</sub> @V <sub>RWM</sub> (μA)	Working Peak Reverse Voltage V <sub>RWM</sub> (V)	Maximum Clamping Voltage V <sub>c</sub> @ I <sub>PP</sub> (V)	Surge Current @8/20us (KA)	Marking
	Min (V)	Max (V)	I <sub>T</sub> (mA)					
AK3-030C	32	37	10	20	30	90	3	AK3030C
AK3-058C	64	70	10	20	58	110	3	AK3058C
AK3-066C	70	80	10	20	66	125	3	AK3066C
AK3-076C	83	95	10	20	76	140	3	AK3076C
AK3-380C	401	443	10	20	380	520	3	AK3380C
AK3-430C	440	490	10	20	430	625	3	AK3430C

## ■ Performance Graphs

FIG.1 V-I Characteristic

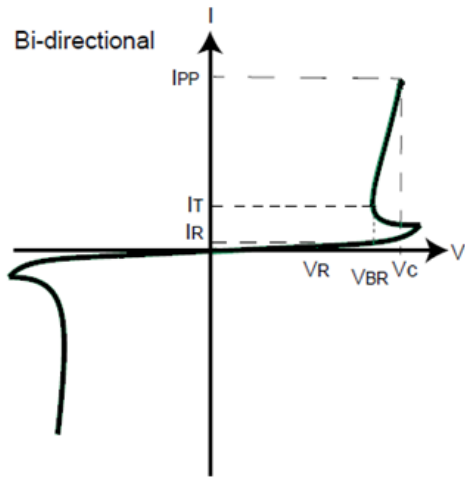


FIG.2 Pulse Derating Curve

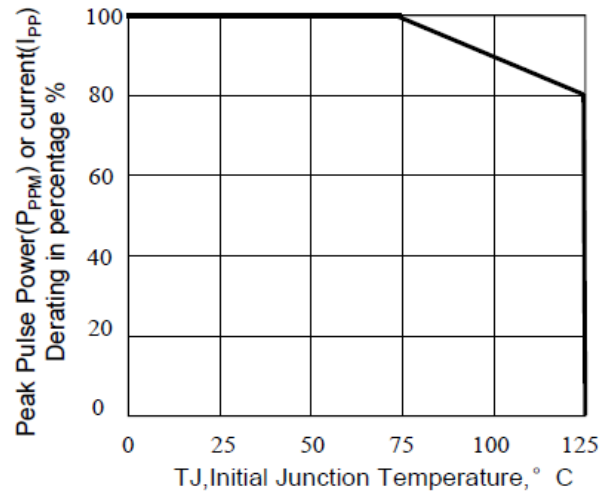


FIG.3 Current 8/20us Waveform per IEC 6100-4-5

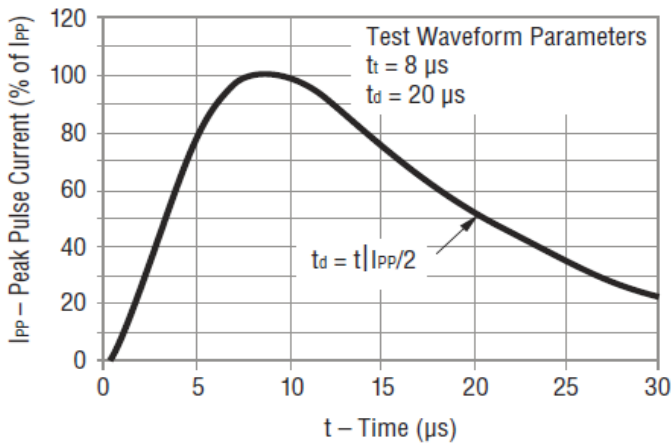
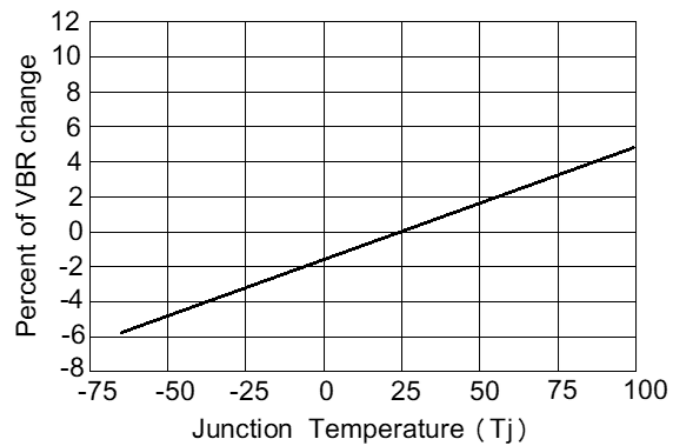


FIG.4: Typical VBR vs. junction temperature



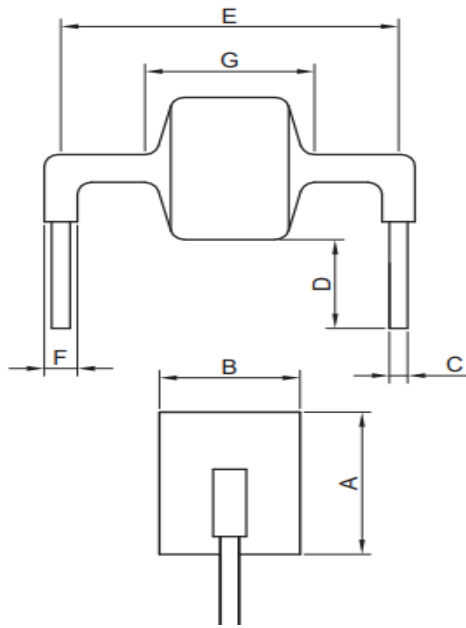
## ■ Ordering Information(Example)

PREFERRED P/N	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	DELIVERY MODE
AK3 SERIES	F1	150	1800	Box



# AK3 Series

## ■ Outline Dimensions



Dim	AK3		note
	mm Min	mm Max	
A	--	11.5	
B	--	10.7	
C	1.2	1.32	
D	6.5	7.5	
E	23.43	24.87	
F	1.8	4	
G	2.8	5.8	AK3030C
	4.5	7.5	AK3058C
	4.5	7.5	AK3066C
	4.5	7.5	AK3076C
	13.2	15.6	AK6380C
	14	16.4	AK3430C



## AK3 Series

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