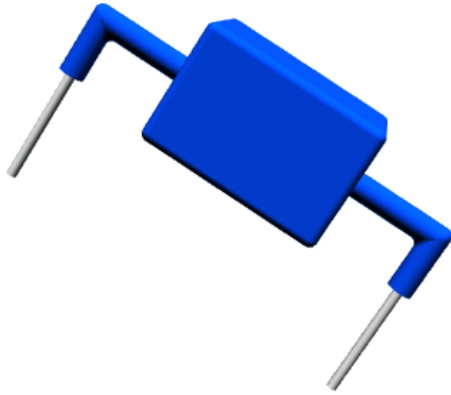


## AK10 Series Transient Voltage Suppressor



### 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	10000
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 VBR@IT			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)					
AK10-058C	64	70	10	20	58	110	10	AK10058C
AK10-066C	70	80	10	20	66	125	10	AK10066C
AK10-076C	83	95	10	20	76	135	10	AK10076C
AK10-170C	180	220	10	20	170	260	10	AK10170C
AK10-190C	200	245	10	20	190	290	10	AK10190C
AK10-200C	222	260	10	20	200	330	10	AK10190C
AK10-240C	250	285	10	20	240	340	10	AK10240C
AK10-380C	401	443	10	20	380	520	10	AK10380C
AK10-430C	440	490	10	20	430	625	10	AK10430C

## ■ Performance Graphs

FIG.1 V-I Characteristic

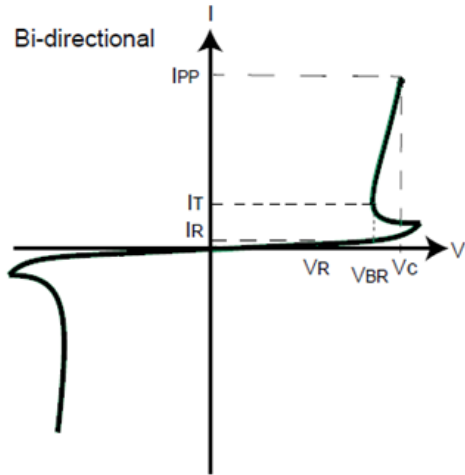


FIG.2 Pulse Derating Curve

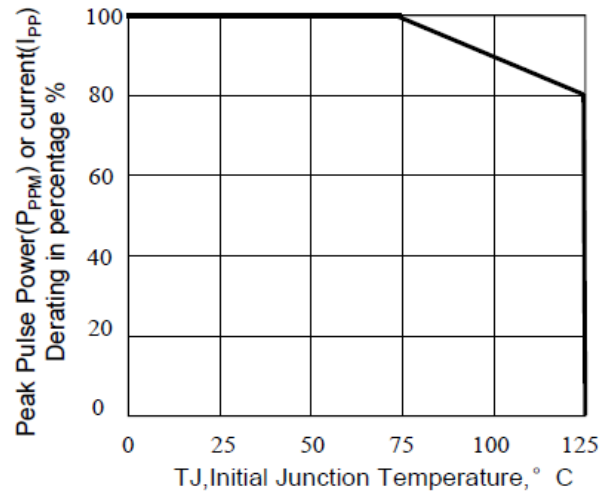


FIG.3 Current 8/20us Waveform per IEC 6100-4-5

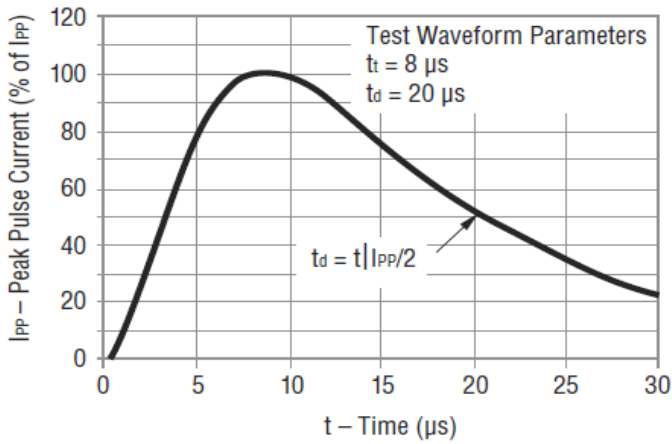
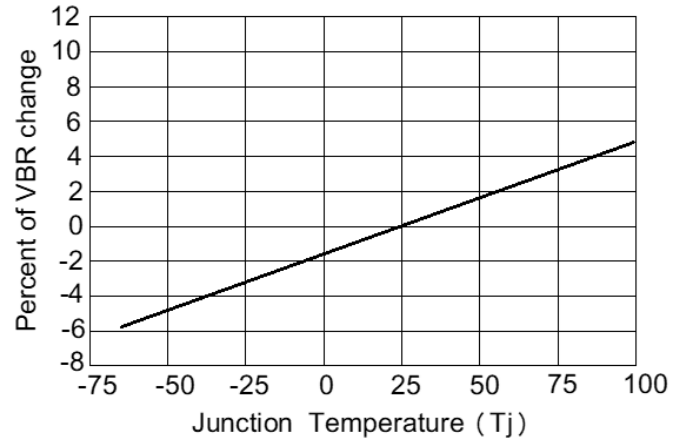


FIG.4: Typical VBR vs. junction temperature



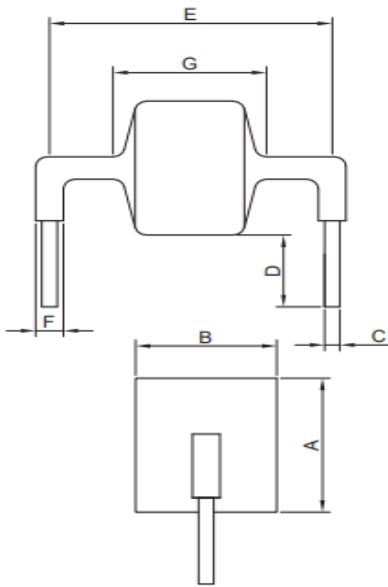
## ■ Ordering Information(Example)

PREFERRED P/N	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	DELIVERY MODE
AK10 SERIES	F1	150	1800	Box



# AK10 Series

## ■ Outline Dimensions



Dim	AK10		note
	mm		
	Min	Max	
A	--	16	
B	--	14.5	
C	1.2	1.32	
D	6.5	7.5	
E	23.43	24.87	
F	1.8	4	
G	4.4	7.4	AK10058C
	4.4	7.4	AK10066C
	5.25	8.25	AK10076C
	7	10	AK10170C
	7.8	10.8	AK10190C
	8.65	11.65	AK10190C
	8.65	11.65	AK10240C
	12	15	AK10380C
13	16	AK10430C	



## AK10 Series

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