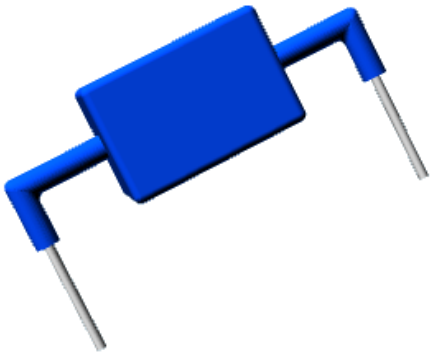
AK1 Series Transient Voltage Suppressor





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 (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Peak pulse current rating per 8/20μs@105℃ IEC 61000-4-5	Ipp	A	1000
Storage temperature	Tstg	℃	-55 ~+150
Junction temperature	Tj	℃	-55 ~+150

■ Electrical Characteristics (TA=25℃ unless otherwise noted)

Part Number	Breakdown Voltage VBR@IT			Maximum Reverse Leakage I_R @V_{RWM} (μA)	Working Peak Reverse Voltage V_{RWM} (V)	Maximum Clamping Voltage Vc@ I_{PP} (V)	Surge Current @8/20us (KA)	Marking
	Min (V)	Max (V)	I_T (mA)					
AK1-076C	83	95	10	20	76	135	1	AK1076C

■ Performance Graphs

FIG.1 V-I Characteristic

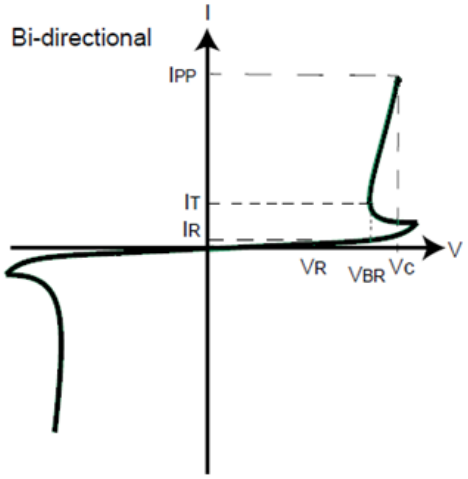


FIG.2 Pulse Derating Curve

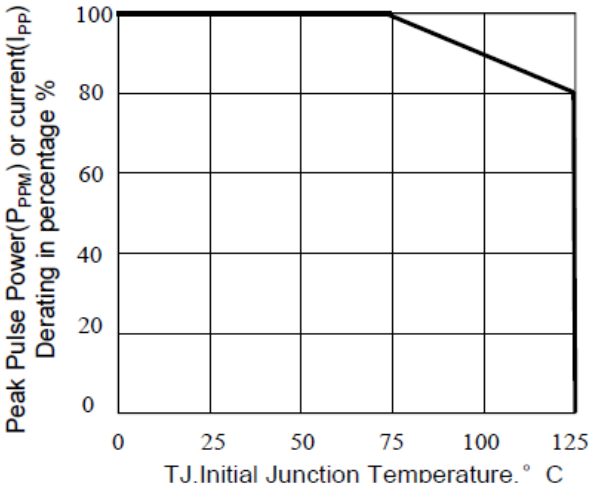


FIG.3 Current 8/20us Waveform per IEC 6100-4-5

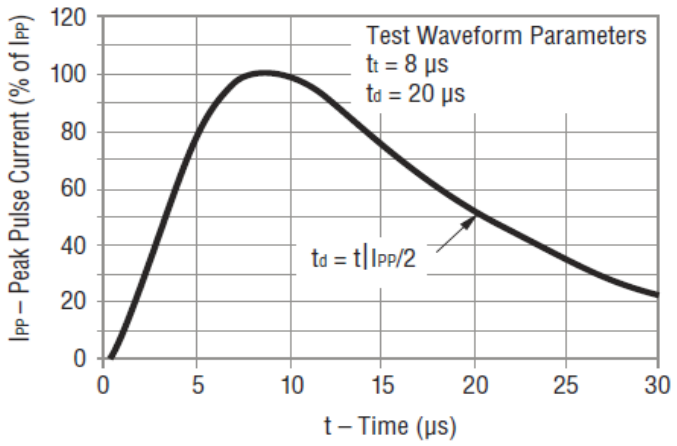
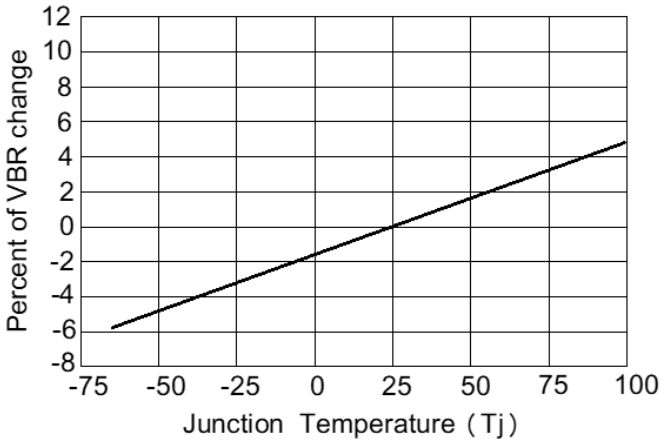


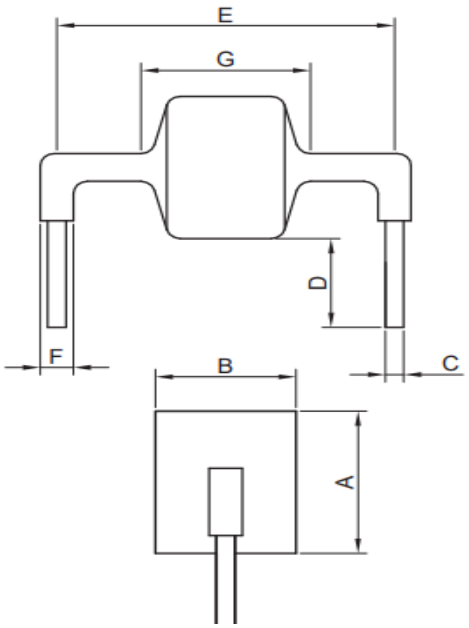
FIG.4: Typical VBR vs. junction temperature



■ Ordering Information(Example)

PREFERED P/N	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	DELIVERY MODE
AK1 SERIES	F1	150	1800	Box

■ Outline Dimensions



AK1			note
Dim	mm Min	mm Max	
A	--	8.5	
B	--	7.7	
C	1.2	1.32	
D	6.5	7.5	
E	23.43	24.87	
F	1.8	4	
G	3.65	6.65	AK1076C

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