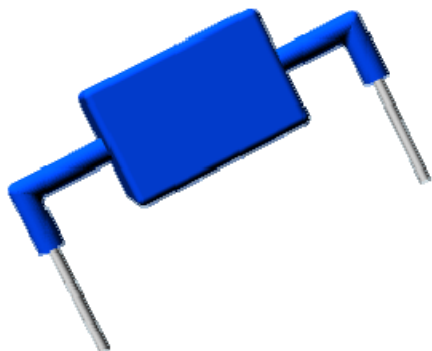


AK6 Series Transient Voltage Suppressor



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_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Peak pulse current rating per 8/20μs@105°C IEC 61000-4-5	I _{pp}	A	6000
Storage temperature	T _{stg}	°C	-55 ~+150
Junction temperature	T _j	°C	-55 ~+150

■ Electrical Characteristics (T_A=25°C unless otherwise noted)

Part Number	Breakdown Voltage V _{BR} @I _T			Maximum Reverse Leakage I _R @V _{RWM} (μA)	Working Peak Reverse Voltage V _{RWM} (V)	Maximum Clamping Voltage V _c @ I _{pp} (V)	Surge Current @8/20us (KA)	Marking
	Min (V)	Max (V)	I _T (mA)					
AK6-058C	64	70	10	20	58	110	6	AK6058C
AK6-066C	70	80	10	20	66	125	6	AK6066C
AK6-076C	83	95	10	20	76	135	6	AK6076C
AK6-170C	180	220	10	20	170	260	6	AK6170C
AK6-190C	200	245	10	20	190	290	6	AK6190C
AK6-240C	250	285	10	20	240	340	6	AK6240C
AK6-380C	401	443	10	20	380	520	6	AK6380C
AK6-430C	440	490	10	20	430	625	6	AK6430C

■ Performance Graphs

FIG.1 V-I Characteristic

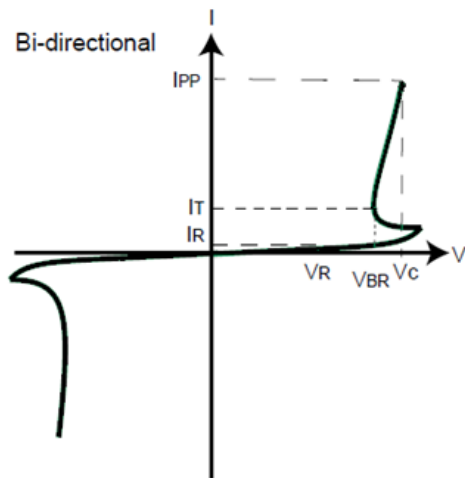


FIG.2 Pulse Derating Curve

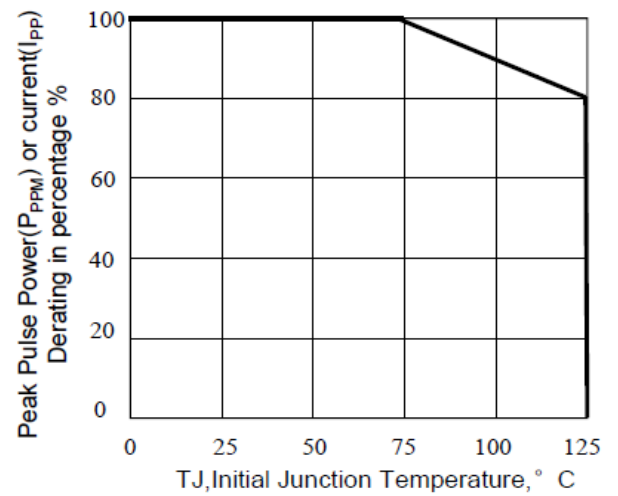


FIG.3 Current 8/20us Waveform per IEC 6100-4-5

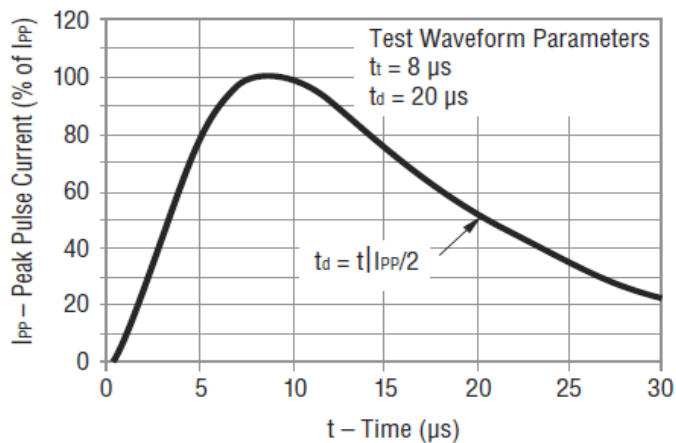
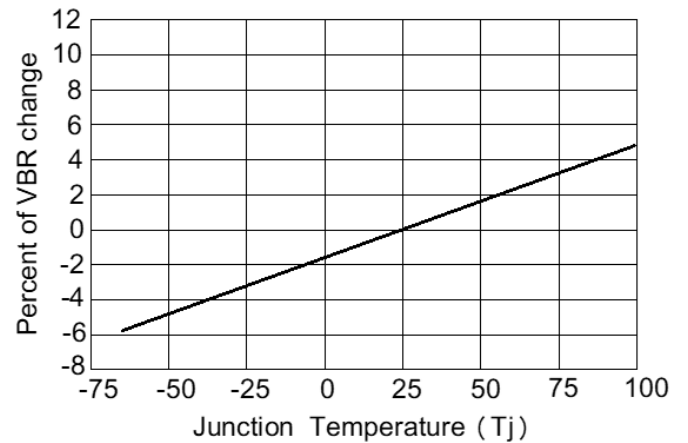


FIG.4: Typical VBR vs. junction temperature

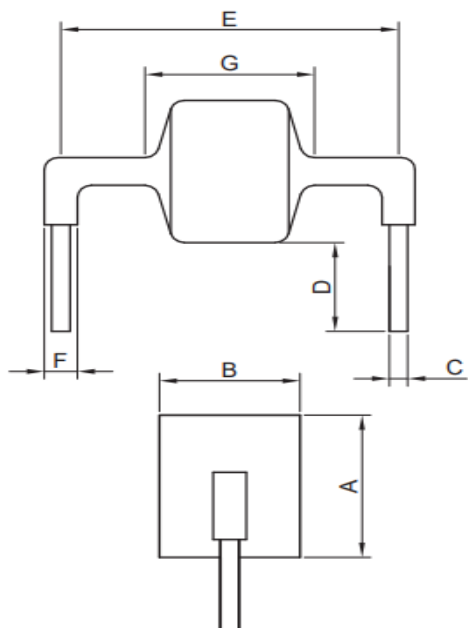


■ Ordering Information(Example)

PREFERRED P/N	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	DELIVERY MODE
AK6 SERIES	A1	150	1800	Box



■ Outline Dimensions



AK6			note
Dim	mm Min	mm Max	
A	--	14.5	
B	--	12.7	
C	1.2	1.32	
D	6.5	7.5	
E	23.43	24.87	
F	1.8	4	
G	4.4	7.4	AK6058C
	4.4	7.4	AK6066C
	5.25	8.25	AK6076C
	7	10	AK6170C
	7.8	10.8	AK6190C
	8.65	11.65	AK6240C
	12	15	AK6380C
	13	16	AK6430C



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