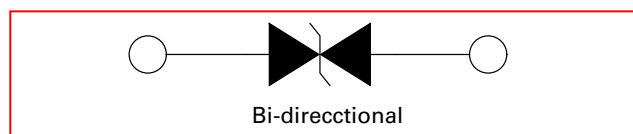


Features

- Very low clamping voltage
- Ultra compact: less than onetenth the size of traditional discrete solutions
- Sharp breakdown voltage
- Low slope resistance
- Bi-directional
- Foldbak™ technology for superior clamping factor
- Symmetric in leads width for easier soldering during assembly.
- IEC 61000-4-2 ESD 15kV(Air), 8kV (Contact)
- ESD protection of data lines in accordance with IEC 61000-4-2
- EFT protection of data lines in accordance with IEC 61000- 4-4
- Halogen-free
- RoHS compliant
- Glass passivated junction
- Pb-free E4 means 2nd level interconnect is Pb-free and the terminal finish material is silver

Function Diagram



Maximum Ratings and Thermal Characteristics (T _A =25°C unless otherwise noted)			
Parameter	Symbol	Value	Unit
Operating Temperature Range	T _J	-55 to 150	°C
Storage Temperature Range	T _{STG}	-55 to 150	°C
Current Rating ¹	I _{PP}	10	kA

AGENCY	AGENCY FILE NUMBER
	Pending

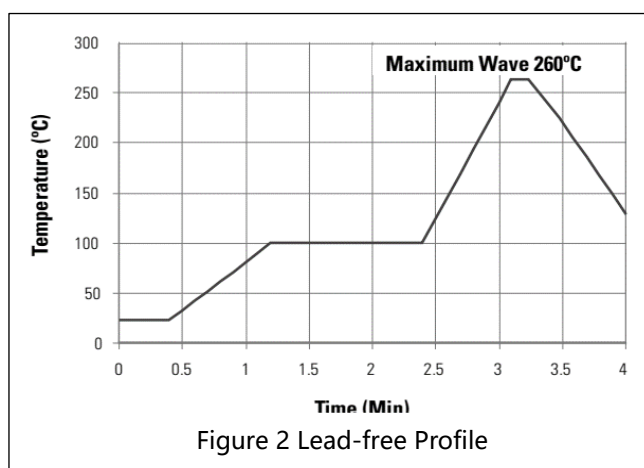
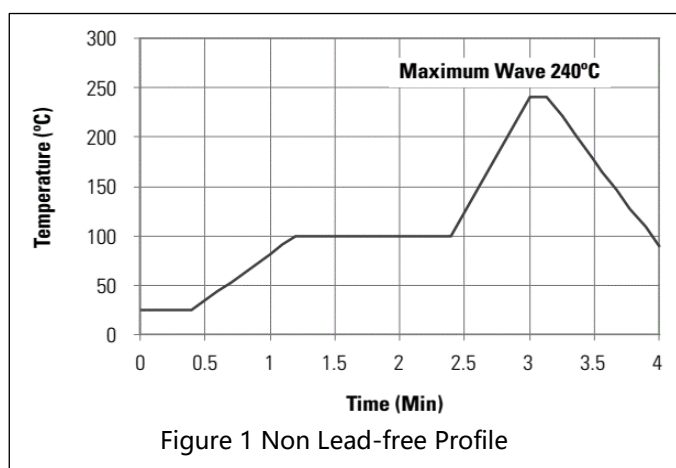
Notes:

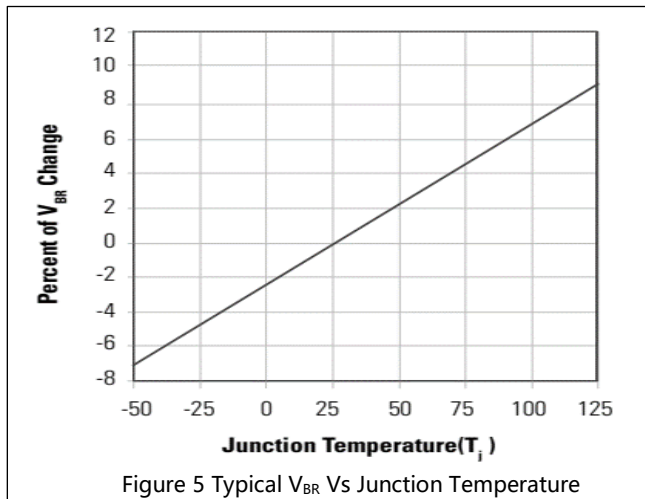
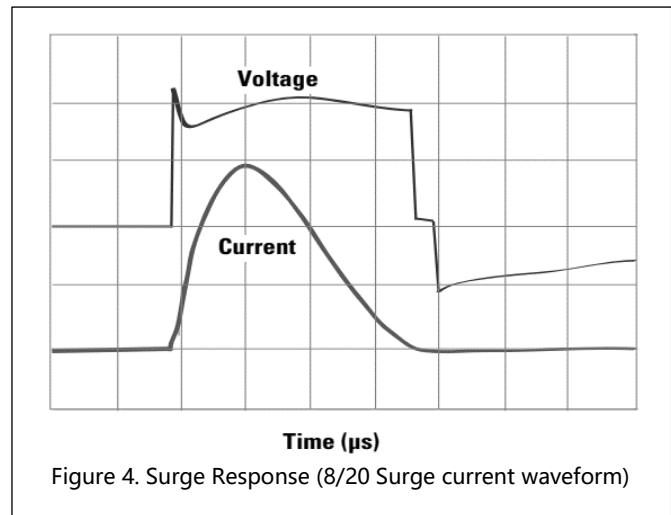
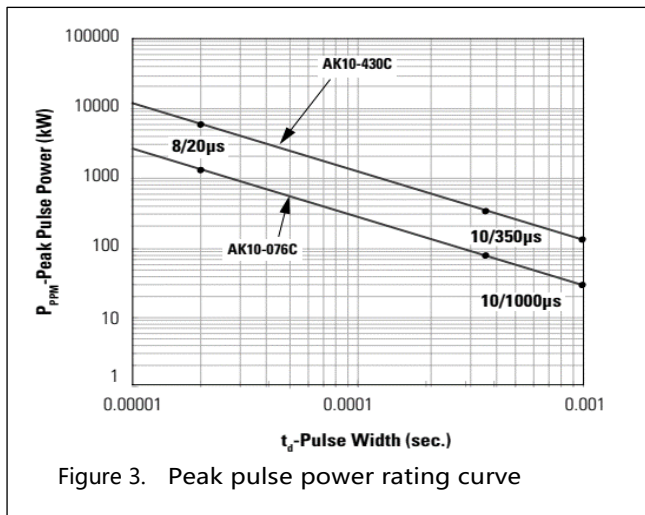
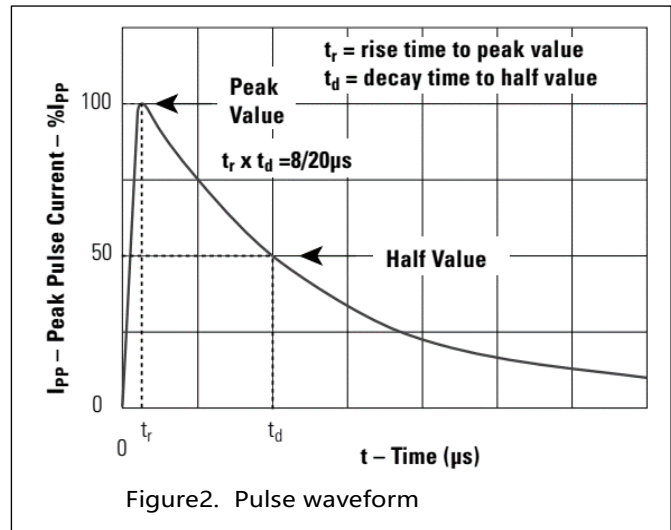
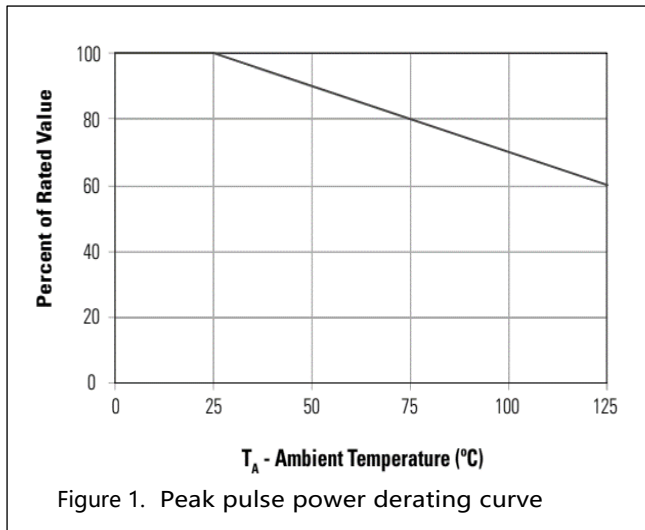
1. Rated IPP measured with 8/20μS pulse.

Characteristics (T = 25°C unless otherwise noted)

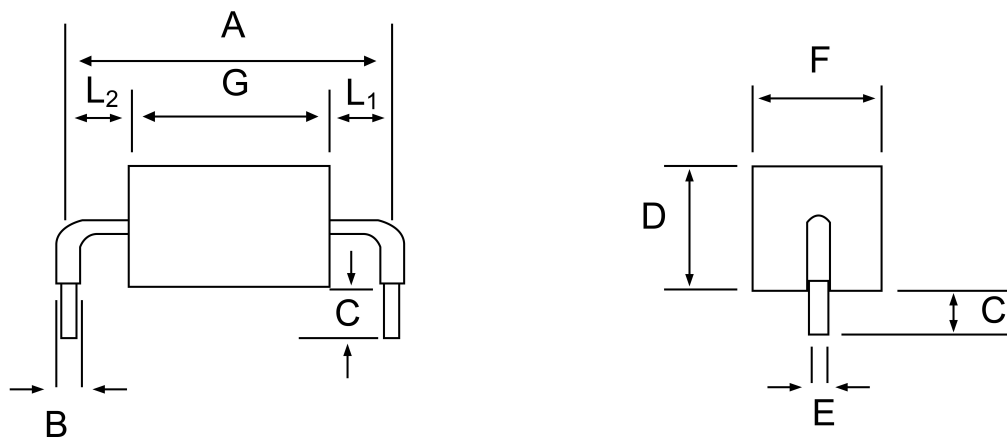
Part Numbers	Part Marking	Standoff Voltage (V _{SO}) Volts	Max. Reverse Leakage (I _R) @ V _{SO} μ A	Typical I _R @ 85°C (μ A)	Reverse Breakdown Voltage (V _{BR}) @ I _T		Test Current I _T (mA)	Max. Clamping Voltage V _{CL} @ I _{PP} Peak Pulse Current (I _{PP}) (Note 1)		Max. Temp Coefficient OF V _{BR} (%/°C)	Max. Capacitance 0 Bias 10kHz (nF)	Agency Approval 
					Min Volts	Max Volts		V _{CL} Volts	I _{PP} Amps			
AK10 - 015C	10-015C	15	10	15	16	19	10	28	10000	0.1	40.0	
AK10 - 030C	10-030C	30	10	15	32	37	10	58	10000	0.1	20.0	
AK10 - 033C	10-033C	33	10	15	36	40	10	65	10000	0.1	20.0	
AK10 - 058C	10-058C	58	10	15	64	70	10	110	10000	0.1	10.0	
AK10 - 066C	10-066C	66	10	15	72	80	10	120	10000	0.1	10.0	
AK10 - 076C	10-076C	76	10	15	85	95	10	140	10000	0.1	6.5	
AK10 - 170C	10-170C	170	10	15	180	220	10	260	10000	0.1	4.0	
AK10 - 190C	10-190C	190	10	15	200	245	10	290	10000	0.1	3.0	
AK10 - 220C	10-220C	220	10	15	230	270	10	330	10000	0.1	2.5	
AK10 - 240C	10-240C	240	10	15	250	285	10	340	10000	0.1	2.2	
AK10 - 270C	10-270C	270	10	15	282	315	10	401	10000	0.1	2.3	
AK10 - 380C	10-380C	380	10	15	401	443	10	520	10000	0.1	2.0	
AK10 - 430C	10-430C	430	10	15	440	490	10	625	10000	0.1	1.4	
AK10 - 530C	10-530C	530	10	15	560	619	10	750	10000	0.1	1.0	

Wave Solder Profile



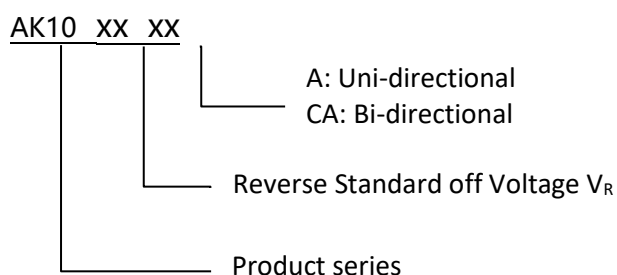
AK10 Series
Ratings and Characteristic Curves (T = 25°C unless otherwise noted)


Dimensions

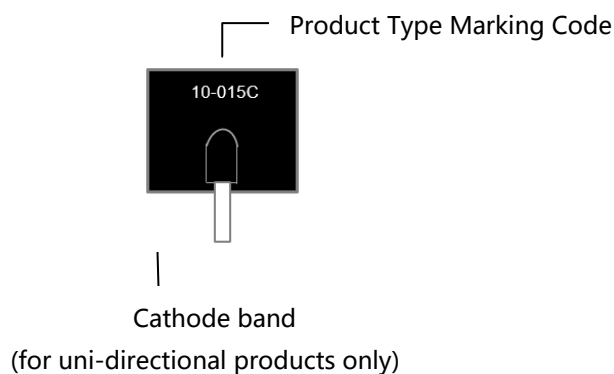


Symbol		Dimensions	
		Inches	Millimeters
A		0.951 +/- 0.039	24.15 +/- 1.00
A-350C		1.370 +/- 0.079	34.70 +/- 2.00
B		0.094 +/- 0.024	2.4 +/- 0.60
C		0.236 +/- 0.039	6.00 +/- 1.00
D		0.570 Max	14.48 Max
E		0.050 +/- 0.002	1.27 +/- 0.050
F		0.500 Max	12.70 Max
G	015C / 025C	0.157 +/- 0.047	4.00 +/- 1.20
	030C / 042C	0.189 +/- 0.047	4.80 +/- 1.20
	058C / 066C / 076C	0.217 +/- 0.047	5.50 +/- 1.20
	100C	0.283 +/- 0.047	7.20 +/- 1.20
	133C	0.319 +/- 0.047	8.10 +/- 1.20
	170C / 190C	0.374 +/- 0.047	9.50 +/- 1.20
	200C	0.417 +/- 0.047	10.60 +/- 1.20
	240C	0.457 +/- 0.047	11.60 +/- 1.20
	275C / 300C	0.563 +/- 0.047	14.30 +/- 1.20
	380C / 430C	0.610 +/- 0.047	15.50 +/- 1.20
L1 / L2		L1=L2 tolerance +/- 0.047 inch (+/- 1.2 mm)	

Part Numbering



Part Marking



Packing

Part number	Package name	Small packing quantity	Packing method
AK10XXXX	AK Package	56	Bulk

Revision history of Specification

Version	Change Items	Effective Date
1.0	Initial Release	21-Aug-2023