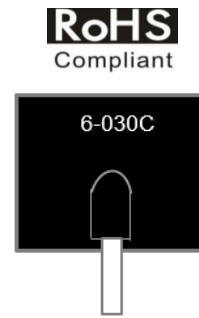


## Features

- Very low clamping voltage
- Ultra compact: less than one-tenth 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 ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)			
Parameter	Symbol	Value	Unit
Operating Temperature Range	$T_J$	-55 to 150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{\text{STG}}$	-55 to 150	$^{\circ}\text{C}$
Current Rating <sup>1</sup>	$I_{\text{PP}}$	6	kA

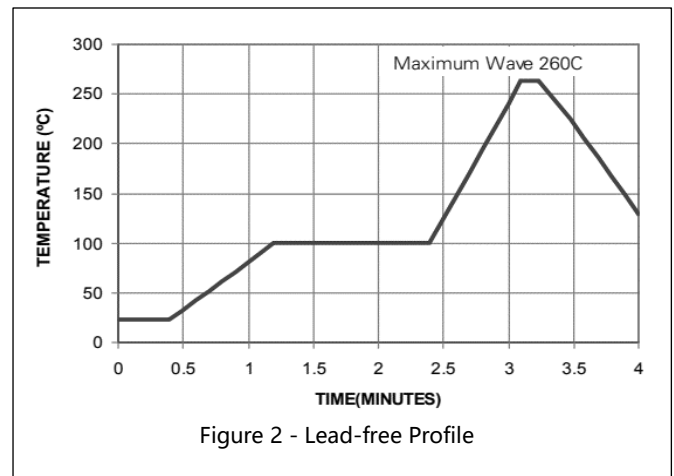
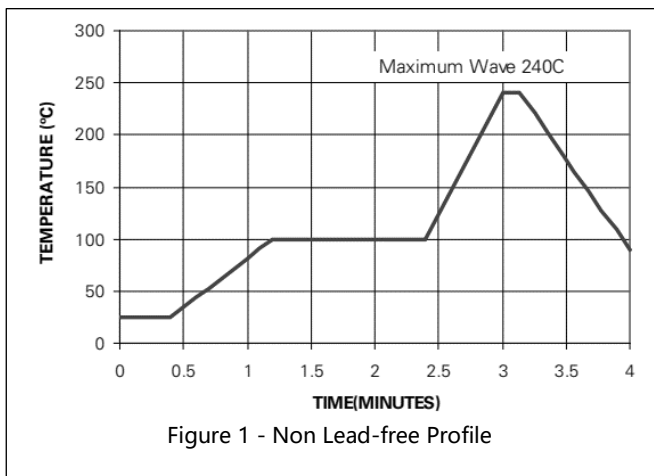
AGENCY	AGENCY FILE NUMBER
	Pending

**Notes:**

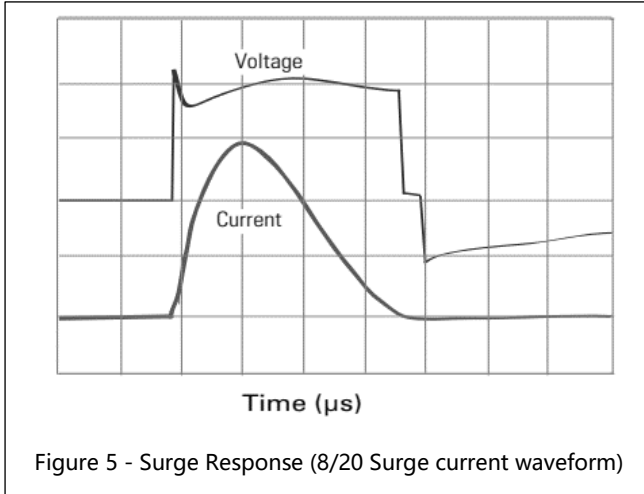
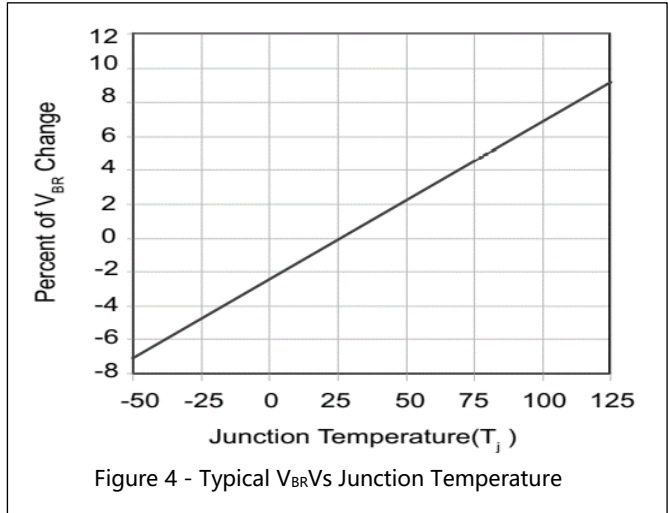
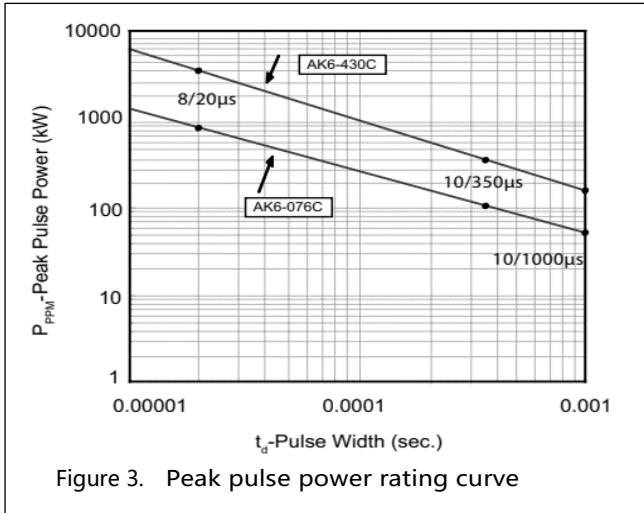
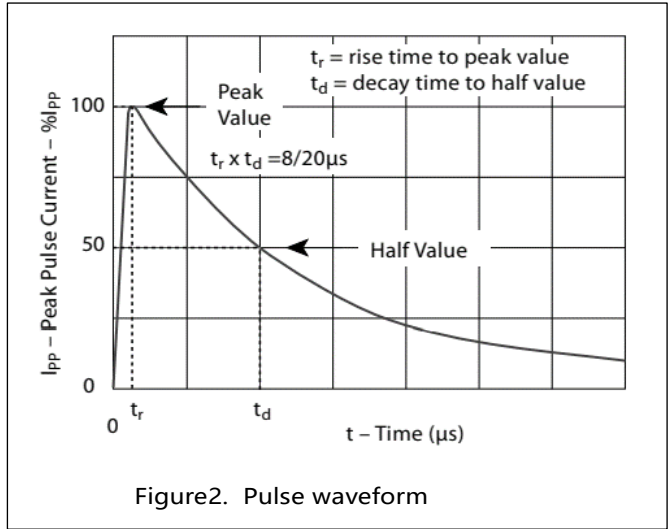
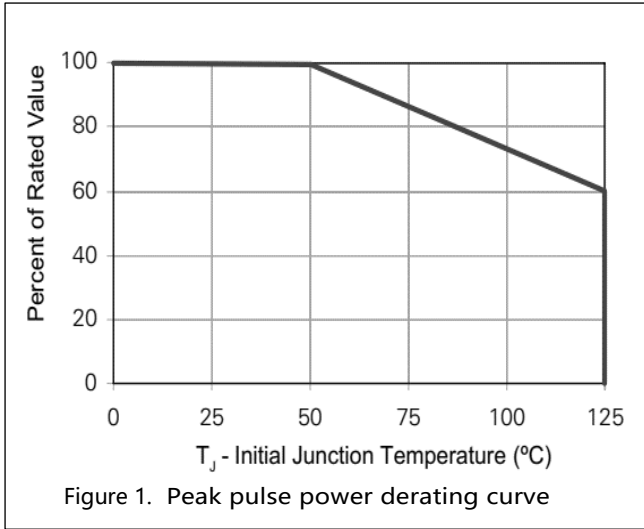
1. Rated IPP measured with 8/20 $\mu\text{s}$  pulse.

**Characteristics (T = 25°C unless otherwise noted)**

Part Numbers	Part Marking	Standoff Voltage (V <sub>SO</sub> ) Volts	Max. Reverse Leakage (I <sub>R</sub> ) @ V <sub>SO</sub> μA	Typical I <sub>R</sub> @ 85°C (μA)	Reverse Breakdown Voltage (V <sub>BR</sub> ) @ I <sub>T</sub>		Test Current I <sub>T</sub> (mA)	Max. Clamping Voltage V <sub>CL</sub> @ I <sub>PP</sub> Peak Pulse Current (I <sub>PP</sub> ) (Note 1)		Max. Temp Coefficient OF V <sub>BR</sub> (%/°C)	Max. Capacitance 0 Bias 10kHz (nF)	Agency Approval 
					Min Volts	Max Volts		V <sub>CL</sub> Volts	I <sub>PP</sub> Amps			
SCAK6 - 030C	6-030C	30	10	15	32	37	10	90	6000	0.1	11.0	
SCAK6 - 058C	6-058C	58	10	15	64	70	10	110	6000	0.1	8.0	
SCAK6 - 066C	6-066C	66	10	15	72	80	10	120	6000	0.1	6.0	
SCAK6 - 076C	6-076C	76	10	15	85	95	10	140	6000	0.1	6.5	
SCAK6 - 170C	6-170C	170	10	15	180	220	10	260	6000	0.1	2.8	
SCAK6 - 190C	6-190C	190	10	15	200	245	10	290	6000	0.1	2.5	
SCAK6 - 240C	6-240C	240	10	15	250	285	10	340	6000	0.1	2.0	
SCAK6 - 380C	6-380C	380	10	15	401	443	10	520	6000	0.1	1.4	
SCAK6 - 430C	6-430C	430	10	15	440	490	10	625	6000	0.1	1.0	

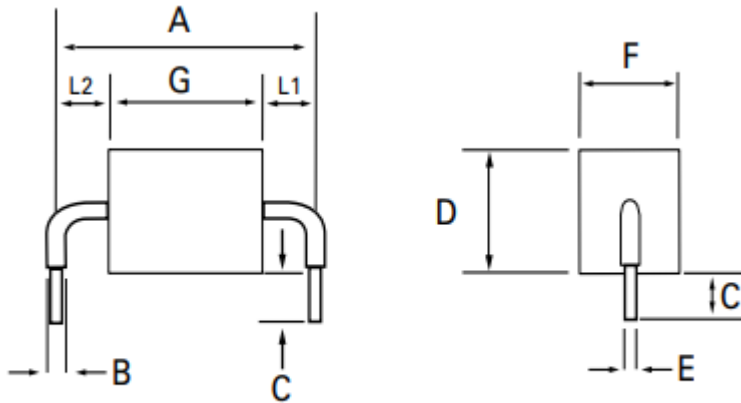
**Wave Solder Profile**


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



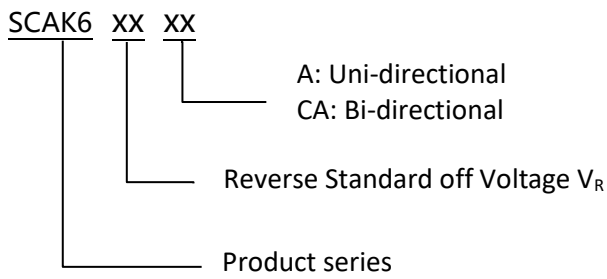
Note:  
The power dissipation causes a change in avalanche voltage during the surge and the avalanche voltage eventually returns to the original value when the transient has passed.

## Dimensions

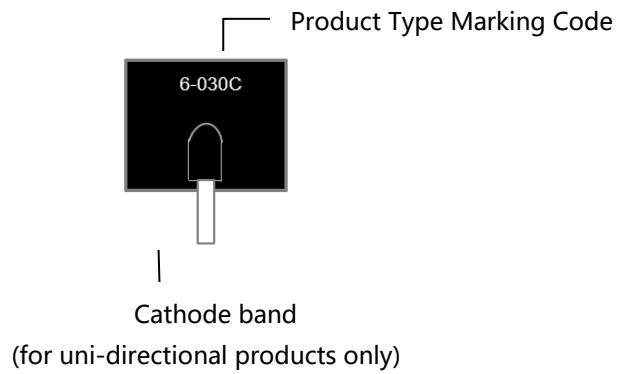


Symbol	Dimensions		
	Inches	Millimeters	
A	0.951 +/- 0.039	24.15 +/- 1.00	
B	0.094 +/- 0.024	2.4 +/- 0.60	
C	0.236 +/- 0.039	6.00 +/- 1.00	
D	0.570 Max	14.48 Max	
E	0.050 +/- 0.002	1.27 +/- 0.050	
F	0.500 Max	12.70 Max	
G	015C / 025C	0.169 +/- 0.047	4.30 +/- 1.20
	030C / 042C	0.197 +/- 0.047	5.00 +/- 1.20
	058C / 066C/ 076C	0.228 +/- 0.047	5.80 +/- 1.20
	100C	0.260 +/- 0.047	6.60 +/- 1.20
	133C	0.287 +/- 0.047	7.30 +/- 1.20
	170C / 190C	0.346 +/- 0.047	8.80 +/- 1.20
	240C	0.406 +/- 0.047	10.30 +/- 1.20
	275C / 300C	0.496 +/- 0.047	12.60 +/- 1.20
	380C/430C	0.559 +/- 0.047	14.20 +/- 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
SCAK6XXXX	AK Package	56	Bulk

Revision history of Specification

Version	Change Items	Effective Date
1.0	Initial Release	15-Aug-2021

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[P6KE13CA](#) [P6KE43CA](#) [P6KE6.8CA](#) [P6KE8.2](#) [P6SMBJ20CA](#) [JANTX1N6072A](#) [SR2835ESKG](#) [SA90CA](#)