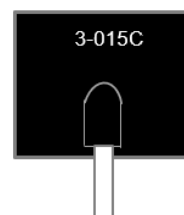


Features

- 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

RoHS
Compliant



Function Diagram



Maximum Ratings and Thermal Characteristics (T _A =25°C unless otherwise noted)			
Parameter	Symbol	Value	Unit
Operating Storage Temperature Range	T _{STG}	-55 to 150	°C
Operating Junction Temperature Range	T _J	-55 to 125	°C
Current Rating ¹	I _{PP}	6	kA

AGENCY	AGENCY FILE NUMBER
	Pending

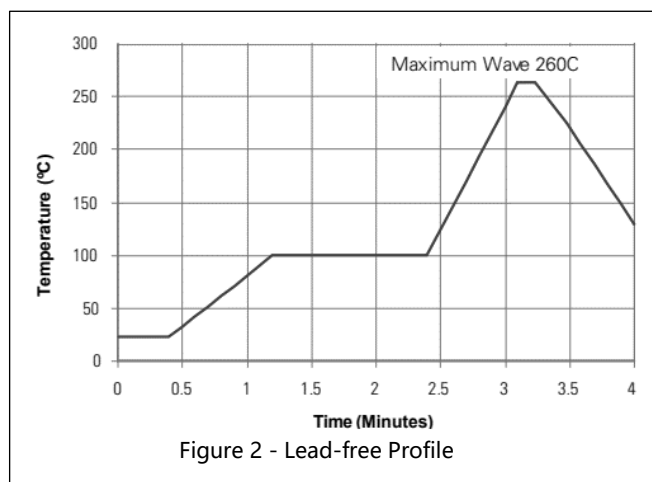
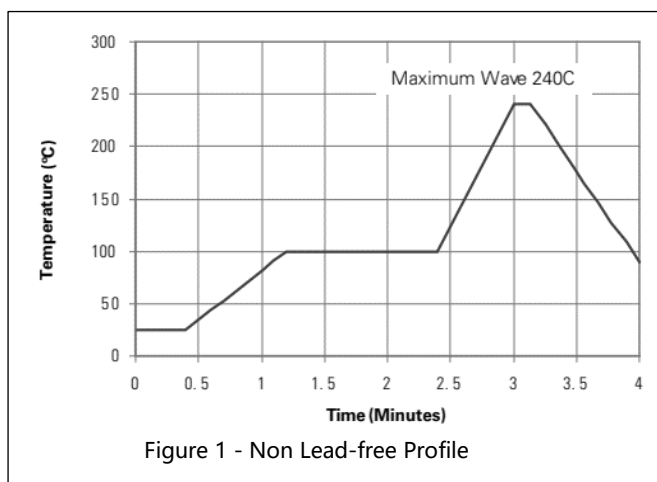
Notes:

1. Rated I_{PP} measured with 8/20μs pulse.

Characteristics (T = 25°C unless otherwise noted)

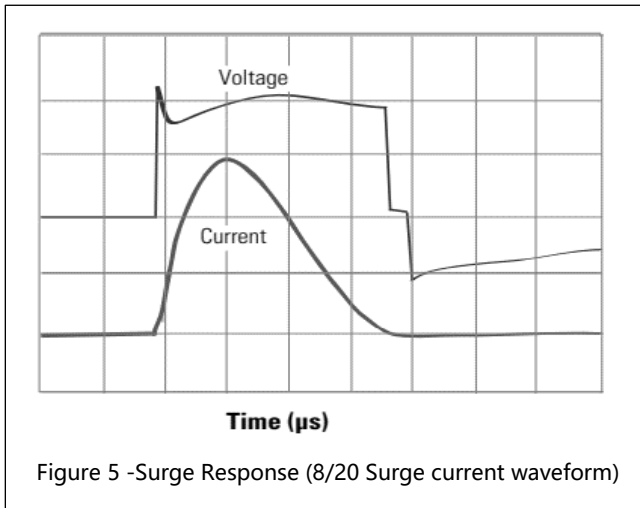
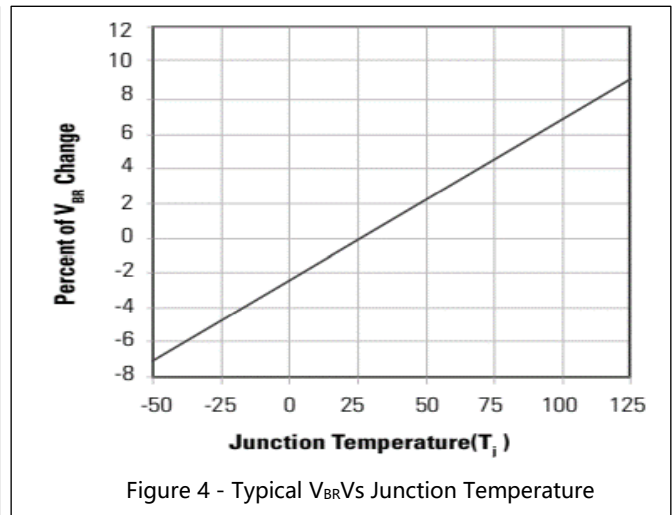
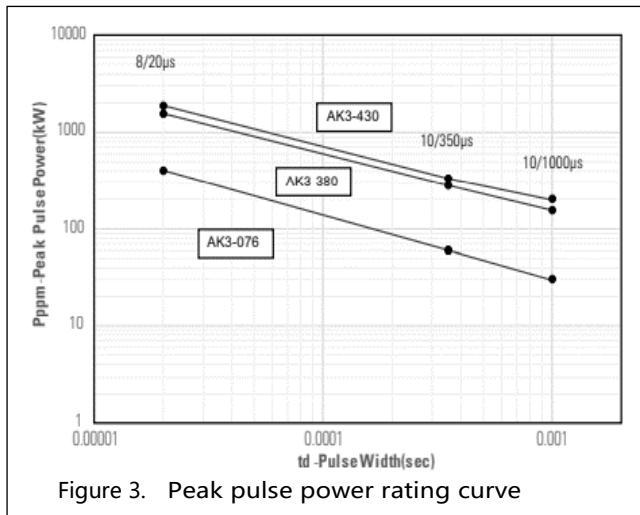
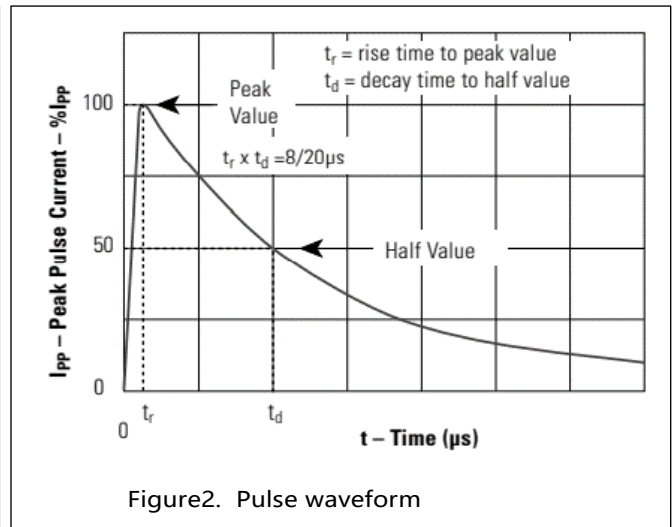
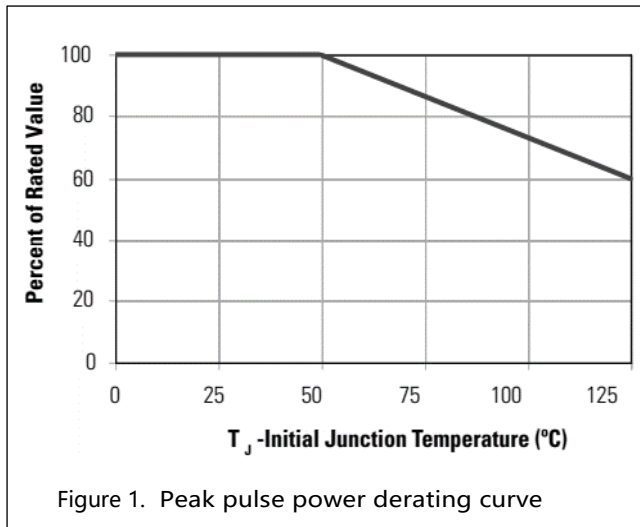
Part Numbers	Part Marking	Standoff Voltage (V _{SO}) Volts	Max. Reverse Leakage (I _R) @ V _{SO} μA	Typical I _R @ 85°C (μA)	Reverse Breakdown Voltage (V _{BR}) @ I _T		Test Current I _T (mA)	Max. Clamping Voltage V _{CL} @ I _{PP} Peak Pulse Current (I _{PP}) (Note 1)		Max. Temp Coefficient OF V _{BR} (%/°C)	Agency Approval
					Min Volts	Max Volts		V _{CL} Volts	I _{PP} Amps		
SCAK3 - 015C	3-015C	15	10	15	16	19	10	28	3000	0.1	
SCAK3 - 020C	3-020C	20	10	15	22	24	10	50	3000	0.1	
SCAK3 - 025C	3-025C	25	10	15	28	30	10	60	3000	0.1	
SCAK3 - 030C	3-030C	30	10	15	32	37	10	90	3000	0.1	
SCAK3 - 038C	3-038C	38	10	15	40	46	10	95	3000	0.1	
SCAK3 - 042C	3-042C	42	10	15	47	51	10	105	3000	0.1	
SCAK3 - 058C	3-058C	58	10	15	64	70	10	110	3000	0.1	
SCAK3 - 066C	3-066C	66	10	15	72	80	10	120	3000	0.1	
SCAK3 - 076C	3-076C	76	10	15	85	95	10	140	3000	0.1	
SCAK3 - 100C	3-100C	100	10	15	110	122	10	165	3000	0.1	
SCAK3 - 133C	3-133C	133	10	15	147	162	10	220	3000	0.1	
SCAK3 - 150C	3-150C	150	10	15	158	194	10	230	3000	0.1	
SCAK3 - 170C	3-170C	170	10	15	179	220	10	260	3000	0.1	
SCAK3 - 190C	3-190C	190	10	15	200	245	10	290	3000	0.1	
SCAK3 - 208C	3-208C	208	10	15	223	246	10	306	3000	0.1	
SCAK3 - 240C	3-240C	240	10	15	250	285	10	435	3000	0.1	
SCAK3 - 275C	3-275C	275	10	15	300	335	10	470	3000	0.1	
SCAK3 - 380C	3-380C	380	10	15	401	443	10	520	3000	0.1	
SCAK3 - 430C	3-430C	430	10	15	440	490	10	625	3000	0.1	

Wave Solder Profile

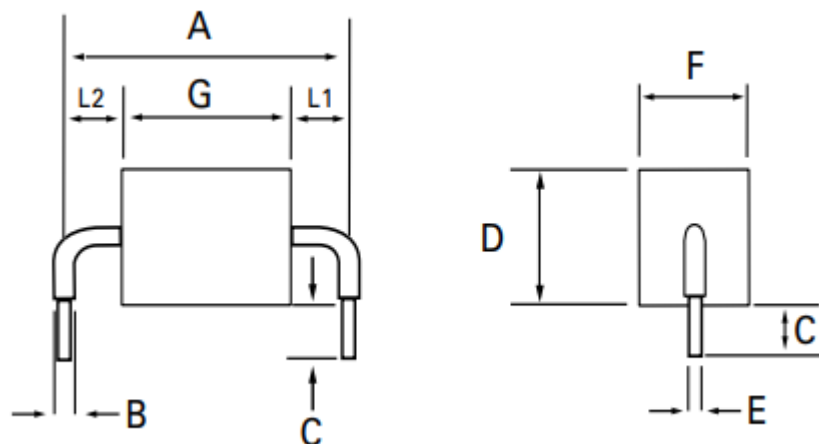




Ratings and Characteristic Curves (T = 25°C unless otherwise noted)

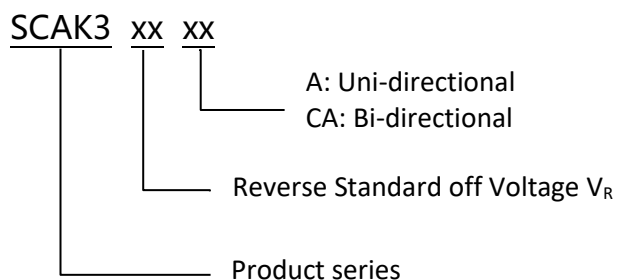


Dimensions

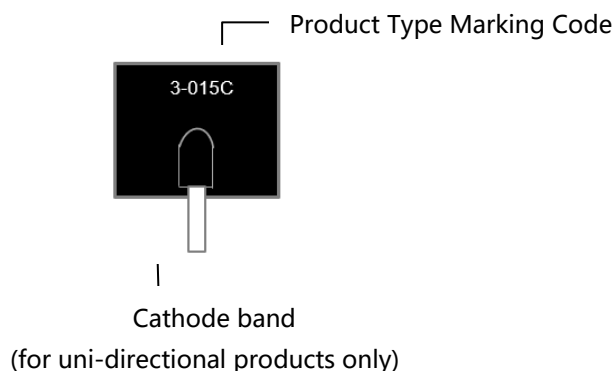


Symbol		Dimensions	
		Inches	Millimeters
A		0.951 +/- 0.039	24.15 +/- 1.00
B		0.094 +/- 0.024	2.4 +/- 0.60
C		0.236 +/- 0.039	6.00 +/- 1.00
	208C	0.145 +/- 0.039	3.68 +/- 1.00
D		0.433 Max	11.0 Max
E		0.050 +/- 0.002	1.27 +/- 0.050
F		0.374 Max	9.50 Max
G	015C/025C	0.157 +/- 0.047	4.00 +/- 1.20
	030C / 042C	0.189 +/- 0.047	4.80 +/- 1.20
	058C / 066C/ 076C	0.217 +/- 0.047	5.50 +/- 1.20
	100C	0.248 +/- 0.047	6.30 +/- 1.20
	133C	0.283 +/- 0.047	7.20 +/- 1.20
	150C	0.323 +/- 0.047	8.20 +/- 1.20
	170C / 190C	0.374 +/- 0.047	9.50 +/- 1.20
	208C	0.394 +/- 0.047	10.00 +/- 1.20
	240C	0.445 +/- 0.047	11.30 +/- 1.20
	275C / 300C	0.551 +/- 0.047	14.00 +/- 1.20
	380C/430C	0.610 +/- 0.047	15.5 +/- 1.20
L1	208C	0.296 +/- 0.047	7.52 +/- 1.20
		L1=L2 tolerance +/- 0.047 inch (+/- 1.2 mm)	
L2	208C	=A-(G+L1) tolerance +/- 0.047 inch (+/- 1.2 mm)	
		L1=L2 tolerance +/- 0.047 inch (+/- 1.2 mm)	

Part Numbering



Part Marking



Packing

Part number	Package name	Small packing quantity	Packing method
SCAK3XXXX	AK Package	56	Bulk

Revision history of Specification

Version	Change Items	Effective Date
1.0	Initial Release	15-Aug-2021
1.1	Update Product Line	27-Mar-2025