

#### 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**



**Bi-direcctional** 

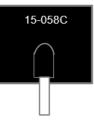
Maximum Ratings and Thermal Characteristics (T <sub>A</sub> =25°C unless otherwise noted)						
Parameter	Symbol	Value	Unit			
Operating Temperature Range	т,	-55 to 125	°C			
Storage Temperature Range	T <sub>stg</sub>	-55 to 150	°C			
Current Rating <sup>1</sup>	Ірр	15	kA			

AGENCY	AGENCY FILE NUMBER
.87	Pending

#### Notes:

1. Rated IPP measured with 8/20µs pulse as defined in IEC 61000-4-5 2nd edition



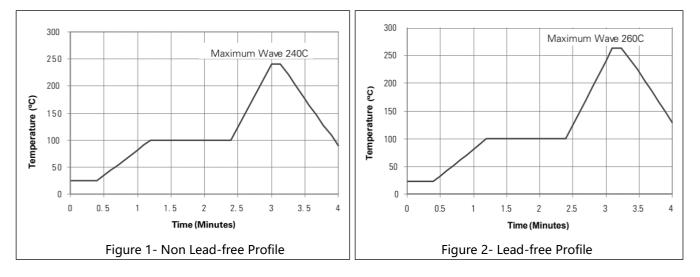




	Part	Voltage (V <sub>so</sub> )	Max. Reverse Leakage (I <sub>R</sub> ) @V <sub>SO</sub> μΑ	Typical I <sub>R</sub> @ 85ºC (μΑ)	Reverse Breakdown Voltage (VBR) @ IT		Test Current I T	Max. Clamping Voltage V <sub>CL</sub> @ I <sub>pp</sub> Peak Pulse Current (I <sub>PP</sub> ) (Note 1)		Max. Temp Coefficient OF V <sub>BR</sub>	Agency Approval
	Marking				Min Volts	Max Volts	(mA)	V <sub>CL</sub> Volts	I PP Amps	(%/ºC)	<b>"91</b>
SCAK15 - 030C	15-030C	30	10	15	32	37	10	90	15000	0.1	
SCAK15 - 042C	15-042C	42	10	15	47	51	10	105	15000	0.1	
SCAK15 - 058C	15-058C	58	10	15	64	70	10	110	15000	0.1	
SCAK15 - 066C	15-066C	66	10	15	72	80	10	120	15000	0.1	
SCAK15 - 076C	15-076C	76	10	15	85	95	10	150	15000	0.1	
SCAK15 - 190C	15-190C	190	10	15	200	245	10	290	15000	0.1	
SCAK15 – 380C	15-380C	380	10	15	401	443	10	520	15000	0.1	

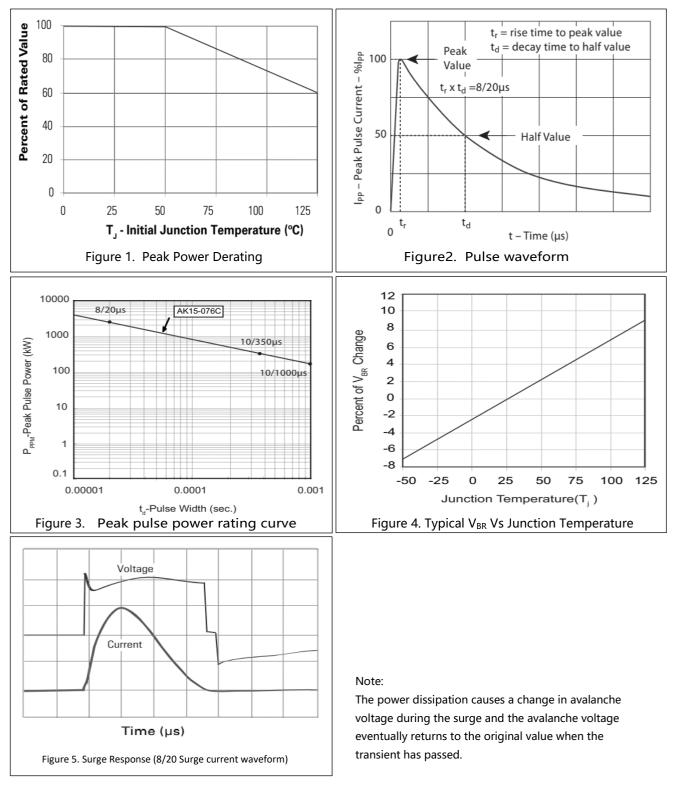
## Characteristics (T = 25°C unless otherwise noted)

# Wave Solder Profile



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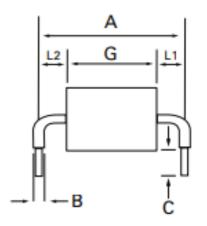


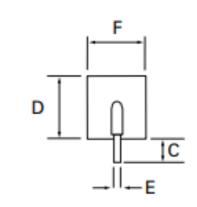
#### Ratings and Characteristic Curves (T = 25°C unless otherwise noted)

Jiangsu Semicon Champion Microelectronics Co., Ltd.



## Dimensions



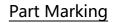


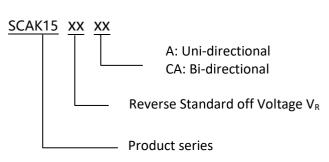
Symbol		Dimensions				
		Inches	Millimeters			
	A	0.951 +/- 0.039	24.15 +/- 1.00			
В		0.094 +/- 0.024	2.4 +/- 0.60			
с		0.238 +/- 0.039	6.00 +/- 1.00			
D		0.630 +/- 0.055	16.00 +/- 1.40			
E		0.050 +/- 0.002	1.27 +/- 0.05			
F		0.571 +/- 0.055	14.50 +/- 1.40			
G	030C/042C	0.283 +/- 0.047	7.20 +/- 1.20			
G	058C/066C/076C	0.335 +/- 0.047	8.50 +/- 1.20			
	L1/L2	L1=L2 tolerance +/- 0.047 inch (+/- 1.2mm)				

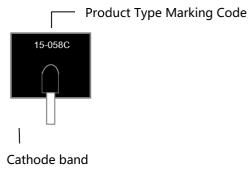
Jiangsu Semicon Champion Microelectronics Co., Ltd.



#### Part Numbering







(for uni-directional products only)

## Packing

Part number Package name		Small packing quantity	Packing method	
SCAK15XXXX	AK Package	56	Bulk	

# **Revision history of Specification**

Version	Change Items	Effective Date
1.0	Initial Release	15-Aug-2021
1.1	Increase The Parameters Of 380V	4-Mar-2025
1.2	Update Product Line	27-Mar-2025