

#### **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
- 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

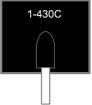
#### **Function Diagram**



Bi-directional

Maximum Ratings and Thermal Characteristics (T <sub>A</sub> =25 <sup>O</sup> C unless otherwise noted)					
Parameter	Symbol	Value	Unit		
Operating Storage Temperature Range	TSTG	-55 to 150	°		
Operating Junction Temperature Range	TJ	-55 to 125	°C		
Current Rating <sup>1</sup>	I <sub>PP</sub>	1	kA		

RoHS
Compliant



AGENCY	AGENCY FILE NUMBER
· <b>9</b> 1	Pending

#### Notes:

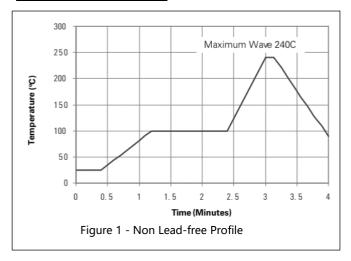
1. Rated  $I_{\text{PP}}$  measured with 8/20 $\!\mu s$  pulse.

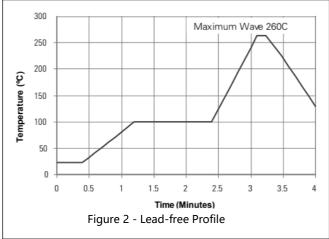


# Characteristics (T =25°C unless otherwise noted)

Part Part Voltage Leak Numbers Marking (Vso) (IR) @	Max. Reverse Leakage	Reverse Typical	Reverse Breakdown Voltage (V <sub>BR</sub> ) @ I <sub>T</sub>		Test Current I <sub>T</sub>	Peak Puls	amping V <sub>CL</sub> @ I <sub>pp</sub> e Current lote 1)	Max. Temp Coefficien t OF V <sub>BR</sub>	Max. Capacitan ce 0 Bias 10kHz	Agency Approval		
			Min Volts	Max Volts	(mA)	V <sub>CL</sub> Volts	I <sub>PP</sub>	(%/°C)	(nF)	<b>87U</b> ⊦		
SCAK1 - 076C	1-076C	76	10	15	85	95	10	140	1000	0.1	8.5	
SCAK1 - 380C	1-380C	380	10	15	401	443	10	570	1000	0.1	2.0	
SCAK1 - 430C	1-430C	430	10	15	440	490	10	625	1000	0.1	2.0	

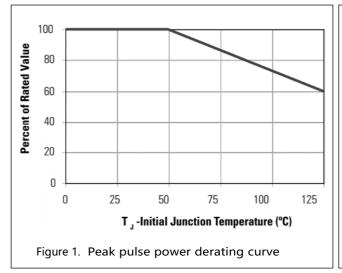
# Wave Solder Profile

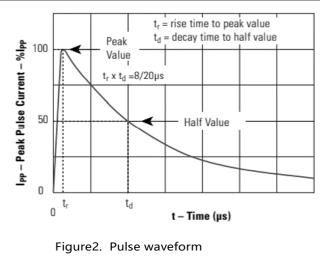


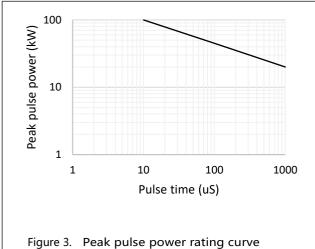


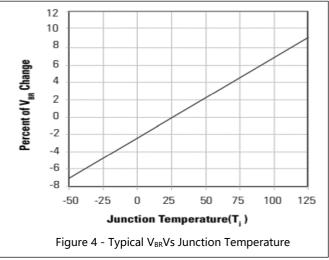


### Ratings and Characteristic Curves (T = 25°C unless otherwise noted)



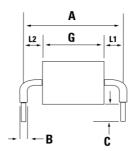


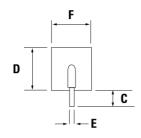






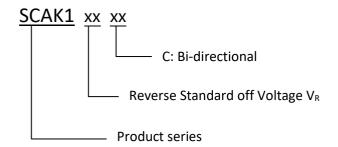
### Dimensions



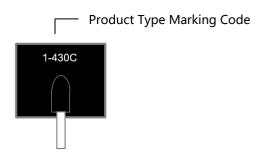


Dimensions	Inches	Millimeters	
Α	0.950 +/- 0.04	24.15 +/- 1.00	
В	0.095 +/- 0.024	2.4 +/- 0.60	
С	0.236 +/- 0.04	6.00 +/- 1.00	
D	0.570 max.	14.48 max.	
E	0.050 +/- 0.002	1.270 +/- 0.05	
F	0.500 max.	12.70 max.	
	0.167 +/- 0.04	4.23 +/- 1.00	
G - 430A	0.200 +/- 0.04	5.08 +/- 1.00	
L1/L2	L1= L2 tolerance +/- 0.04 inch (1.0 mm)		

### Part Numbering



### Part Marking



# **Packing**

Part number	Package name	Small packing quantity	Packing method	
SCAK1XXXX	AK Package	56	Bulk	

# **Revision history of Specification**

Version	Change Items	Effective Date
1.0	Initial Release	25-Aug-2022