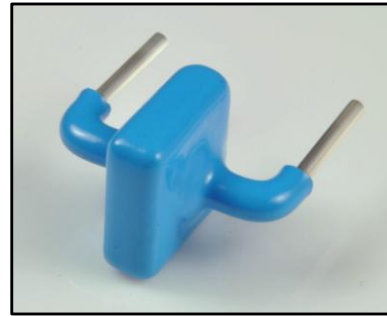


**Reverse Stand-Off Voltage :**  
**58 to 430 V**

**Lightning Surge Protection  
Axial Lead  
Transient Voltage Suppressors**

**Features**

- High current transient suppressors.
- Excellent Clamping Capability.
- Glass Passivated chip
- Bi-directional.
- Low Slope Resistance.
- Hazardous Substances Free.
- RoHS Compliant.
- High Temperature soldering: 260°C/10 seconds at terminals
- Epoxy Encapsulated.
- UL certified

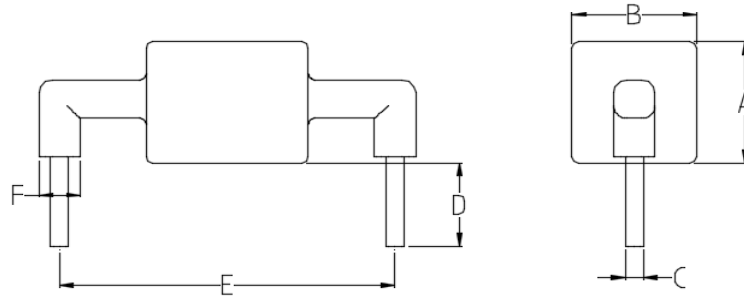


**Maximum Ratings And Thermal Characteristics**

Parameter	Symbol	Value		UNIT
Current Rating, Rated IPP measured with 8/20us pulse	Ipp	K1	1	Kamps
		KA	3	
		KB	6	
		KC	10	
		KD	15	
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	- 55 to +150		°C



Dimensions



K1 Series		
Dimensions	Inches	Millimeters
A	max 0.571	max 14.5
B	max 0.500	max 12.7
C	0.051 ± 0.001	1.30 ± 0.02
D	0.236 ± 0.039	6.0 ± 1.0
E	0.95 ± 0.028	24.15 ± 0.7
F	max 0.098	max 2.5

KA Series		
Dimensions	Inches	Millimeters
A	max 0.571	max 14.5
B	max 0.500	max 12.7
C	0.051 ± 0.001	1.30 ± 0.02
D	0.236 ± 0.039	6.0 ± 1.0
E	0.95 ± 0.028	24.15 ± 0.7
F	max 0.098	max 2.5

KB Series		
Dimensions	Inches	Millimeters
A	max 0.571	max 14.5
B	max 0.500	max 12.7
C	0.051 ± 0.001	1.30 ± 0.02
D	0.236 ± 0.039	6.0 ± 1.0
E	0.95 ± 0.028	24.15 ± 0.7
F	max 0.098	max 2.5

KC Series		
Dimensions	Inches	Millimeters
A	max 0.630	max 16
B	max 0.571	max 14.5
C	0.051 ± 0.001	1.30 ± 0.02
D	0.236 ± 0.039	6.0 ± 1.0
E	0.95 ± 0.028	24.15 ± 0.7
F	max 0.098	max 2.5

KD Series		
Dimensions	Inches	Millimeters
A	max 0.661	max 16.8
B	max 0.606	max 15.4
C	0.051 ± 0.001	1.30 ± 0.02
D	0.236 ± 0.039	6.0 ± 1.0
E	0.95 ± 0.028	24.15 ± 0.7
F	max 0.098	max 2.5



**Ratings and Characteristics Curves ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)**

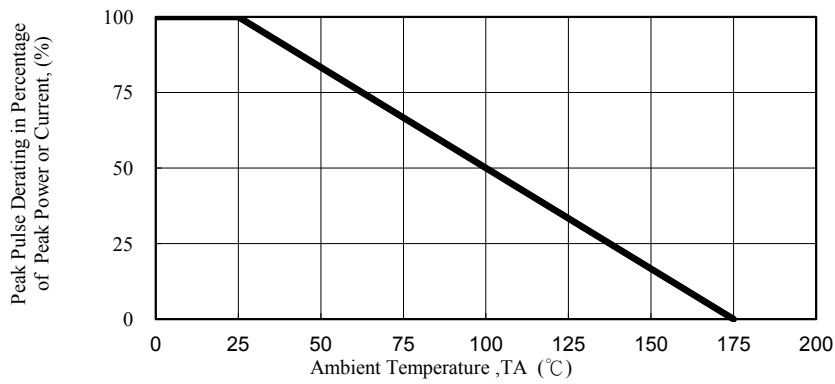


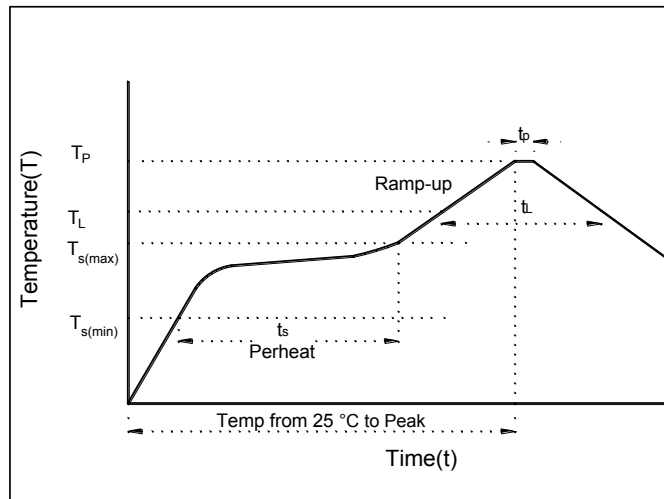
Fig. 1 - Pulse Derating Curve

**Soldering Parameters**

IR-Reflow Condition			
Pre Heat	Temp. min	150	$^{\circ}\text{C}$
	Temp. max	200	$^{\circ}\text{C}$
	Time(min to max)	60-180	sec
Ramp up rate (150-200 $^{\circ}\text{C}$ )		<3	$^{\circ}\text{C}/\text{sec}$

Reflow	Liquidus Temp.	>220	$^{\circ}\text{C}$
	Peak Temp.	255-260	$^{\circ}\text{C}$
	Time(Liq. to Peak)	60-150	sec
Ramp up rate (220-200 $^{\circ}\text{C}$ )		<3	$^{\circ}\text{C}/\text{sec}$
Time within actual peak temp.		10-30	sec

Ramp down Rate		<5	$^{\circ}\text{C}/\text{sec}$
Time(25 $^{\circ}\text{C}$ to Peak temp.)		<6	min
Do not exceed		280	$^{\circ}\text{C}$





Electrical Characteristics( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

Part Number	Reverse Stand-Off Voltage		Breakdown Voltage	Test Current	Current Rating	Maximum Energy	Maximum Clamping Voltage	Reverse Leakage
	VAC(V)	VDC(V)	VBR(V) MIN.@IT	IT(mA)	8/20 $\mu$ s (KA)	10/1000 $\mu$ s (A)	VC(V) @IPP	IR( $\mu$ A) @VDC
K1076	54	76	83	10	1	5600	135	20
KA058	40	58	64	10	3	2450	110	20
KA076	54	76	85	10	3	2800	140	20
KA380	275	380	401	10	3	15000	520	20
KA430	310	430	440	10	3	18000	625	20
KB058	40	58	64	10	6	4900	110	20
KB066	45	66	70	10	6	5200	125	20
KB076	54	76	83	10	6	5600	135	20
KB170	130	170	180	10	6	14000	260	20
KB190	145	190	200	10	6	16800	290	20
KB240	180	240	250	10	6	18000	340	20
KB380	275	380	401	10	6	30000	520	20
KB430	310	430	440	10	6	30000	625	20
KC058	40	58	64	10	10	8158	110	20
KC066	45	66	70	10	10	8658	125	20
KC076	54	76	83	10	10	9324	135	20
KC170	130	170	180	10	10	23310	260	20
KC190	145	190	200	10	10	27972	290	20
KC240	180	240	250	10	10	18000	340	20
KC380	275	380	401	10	10	30000	520	20
KC430	310	430	440	10	10	30000	625	20
KD058	40	58	64	10	15	13058	110	20
KD076	54	76	85	10	15	14924	150	20