

6KA-SERIES DATA SHEET

AXIAL LEADED TRANSIENT VOLTAGE SUPPRESSOR

FEATURES

- Glass passivated chip junction
- Bi-directional
- RoHS compliant
- 6000A surge capability at 8 x 20μsec waveform
(per IEC-61000-4-5)
- Excellent clamping capability
- Coating powder has Underwriters Laboratory
Flammability Classification 94V-0
- Operation and storage temperature : -55℃~150℃



for reference only

MECHANICAL DATA

Terminal : Ag Plated leads , solderable per
MIL-STD-750,Method 2026

Mounting Position : any

Electrical Characteristics

PART NUMBER	REVERSE STAND- OFF VOLTAGE $V_{RWM}(V)$	REVERSE LEAKAGE @ $V_{RWM} I_R$ (μA)	BREAKDOWN VOLTAGE $V_{BR}(V) @ I_T$		TEST CURRENT I_T (mA)	MAXIMUM CLAMPING VOLTAGE @ $I_{pp} V_c(V)$ (8/20uS)	PEAK PULSE CURRENT $I_{pp} (A)$ (8/20uS) (NOTE 1)
			Min.	Max.			
BI-POLAR							
6KA-058C	58	10	64	70	10	110	6,000
6KA-076C	76	10	85	95	10	140	6,000
6KA-100C	100	10	110	130	10	180	6,000
6KA-170C	170	10	180	220	10	260	6,000
6KA-190C	190	10	200	240	10	290	6,000
6KA-240C	240	10	250	285	10	340	6,000
6KA-270C	270	10	280	320	10	380	6,000
6KA-380C	380	10	401	443	10	520	6,000
6KA-430C	430	10	440	490	10	625	6,000

NOTE 1 : Using 8*20 uS wave shaped defined in IEC 61000-4-5

6KA-SERIES DATA SHEET

AXIAL LEADED TRANSIENT VOLTAGE SUPPRESSOR

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

Fig. 1 - Peak Pulse Power Rating

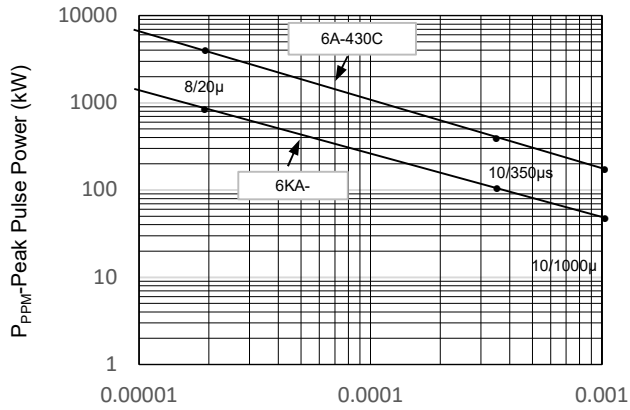


Fig.2 - Pulse Derating Curve

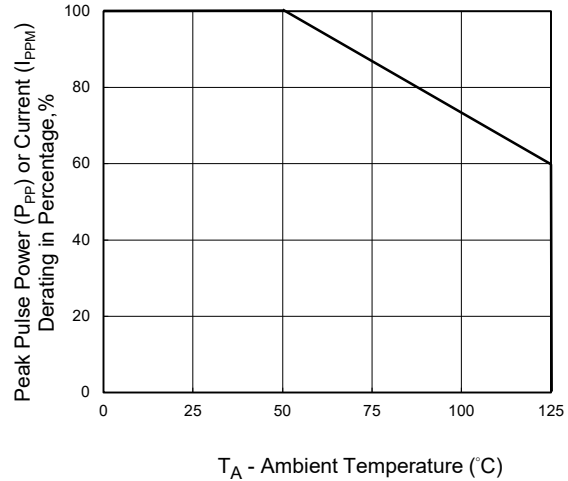


Fig. 3 - Pulse Waveform

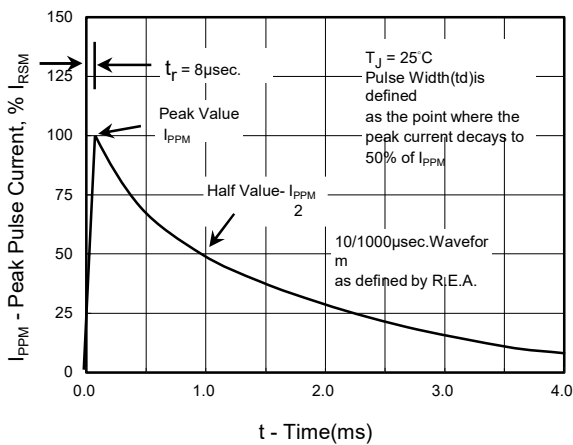


Fig. 4 - Typical V_{BR} Vs Junction Temperature

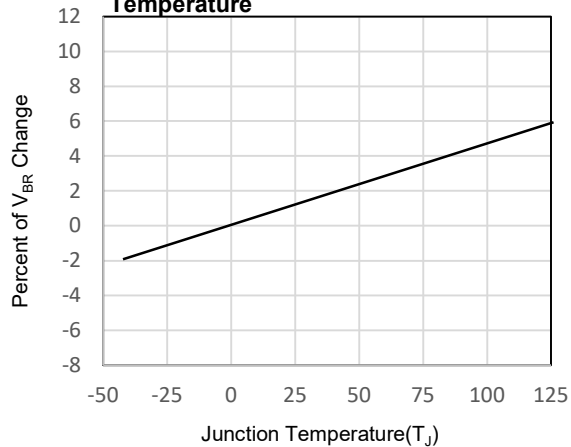
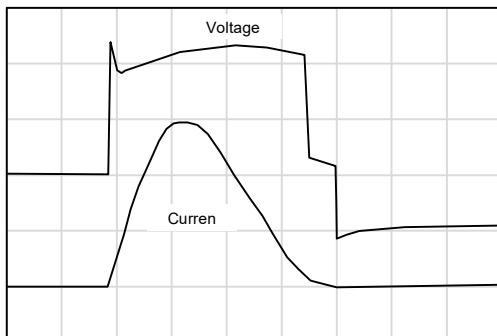
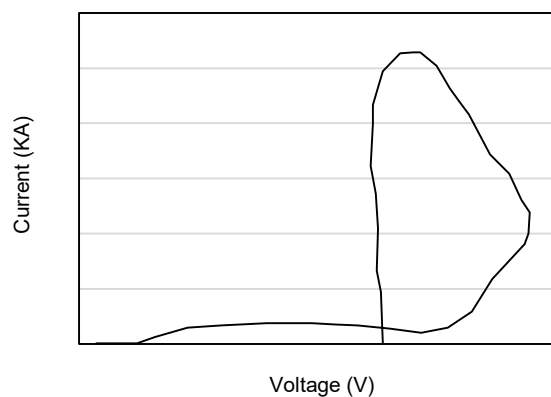


Fig. 5 - Surge Response (8/20 μs waveform)



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

Fig. 6 - Surge Response



6KA-SERIES DATA SHEET

AXIAL LEADED TRANSIENT VOLTAGE SUPPRESSOR

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

Fig. 7 - Non Lead-free profile

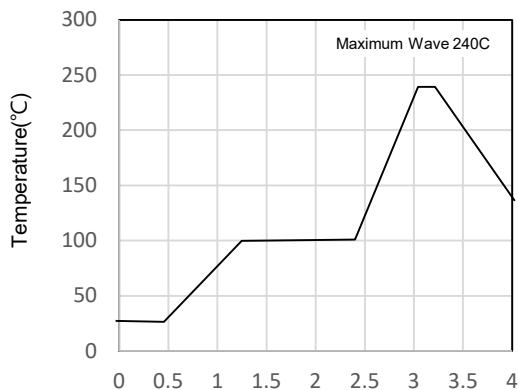
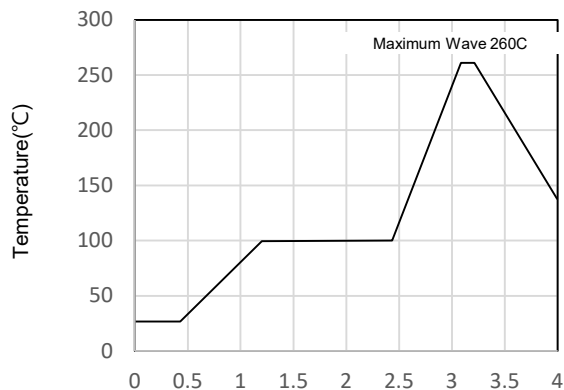
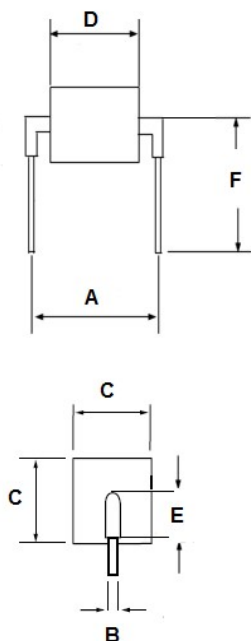


Fig. 8 - Lead-free profile



Dimensions



Dimensions	Inchs	Millimeters
A	0.950+/-0.028	24.15+/-0.72
B	0.049+/-0.0019	1.25+/-0.05
C	0.531 max	13.5 max
D-058C	0.196 max	5.0max
D-076C	0.236 max	6.0 max
D-100C	0.275max	7.0 max
D-170C/190C	0.393 max	10.0 max
D-240C	0.472 max	12.0 max
D-270C	0.512 max	13.0 max
D-380C/430C	0.629 max	16.0 max
E	0.259 max	6.6 max
F	0.590 min	15.0 min