

8x20uS 3KA Transient Voltage Suppressors

TVS Diodes - 3KA > AK3 Series



Mechanical Data

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

Mounting Position: any

Features

- Glass passivated junction
- Bi-directional
- RoHS compliant
- 3KA Surge capability at 8 x 20uS waveform(per IEC-61000-4-5)
- Excellent clamping capability
- Coating powder has underwriters Laboratory

Flammability Classification 94V-0

- Operation and storage Temperature:-40℃ to +125℃



Electrical Characteristics

Part Number	Reverse Stand-Off Voltage		Breakdown Voltage $V_{BR@IT}$		Test Current	Maximum Clamping Voltage @IPP	Peak Pulse Current 8/20uS	Maximum Energy	Reverse Leakage @ V_{RWM}	Delivery Time
	V_{AC}	V_{DC}	Min(V)	Max(V)	$I_T(mA)$	$V_C(V)$	I_{PP}	10/1000uS	$I_R(\mu A)$	Days
AK3-015C	11V	15V	16	19	10	85	3KA	650A	20	15days
AK3-020C	14V	20V	22	24	10	90	3KA	800A	20	15days
AK3-025C	17V	25V	28	30	10	95	3KA	950A	20	15days
AK3-030C	21V	30V	32	37	10	100	3KA	1200A	20	15days
AK3-042C	30V	42V	47	51	10	105	3KA	1700A	20	15days
AK3-058C	40V	58V	64	70	10	110	3KA	2450A	20	15days
AK3-066C	45V	66V	72	80	10	120	3KA	2600A	20	15days
AK3-076C	54V	76V	85	95	10	140	3KA	2800A	20	15days
AK3-100C	72V	100V	110	120	10	165	3KA	4250A	20	15days
AK3-133C	100V	133V	147	162	10	220	3KA	5300A	20	15days
AK3-170C	130V	170V	179	220	10	260	3KA	7000A	20	15days
AK3-190C	145V	190V	200	245	10	290	3KA	8400A	20	15days
AK3-200C	150V	200V	223	246	10	330	3KA	8600A	20	15days

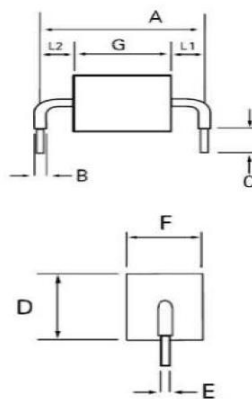
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	V_{AC}	V_{DC}	Min(V)	Max(V)						
AK3-240C	180V	240V	250	285	10	340	3KA	9100A	20	15days
AK3-275C	210V	275V	300	335	10	435	3KA	9500A	20	15days
AK3-300C	230V	300V	330	366	10	470	3KA	12750A	20	15days
AK3-380C	275V	380V	401	443	10	520	3KA	15000A	20	15days
AK3-430C	310V	430V	440	490	10	625	3KA	18000A	20	15days

Dimensions

Dimendions	Inches	Millimeters
A	0.95 ± 0.04	24.15 ± 1.00
B	0.095 ± 0.024	2.40 ± 0.6
C-015/030/058/066/076	0.236 ± 0.04	6.00 ± 1.00
C-150/170/380/430	0.145 ± 0.04	3.68 ± 1.00
D	0.433max.	11.0max
E	0.05 ± 0.002	1.27 ± 0.05
F	0.374max.	9.5 0m ax.
G-015/030	0.130 ± 0.04	3.30 ± 1.20
G-058/066/076	0.168 ± 0.04	4.27 ± 1.20
G-170	0.42 ± 0.04	10.67 ± 1.20
G-380	0.547 ± 0.04	13.9 ± 1.20
G-430	0.583 ± 0.04	14.8 ± 1.20
L1-015/030	0.409 ± 0.04	10.4 ± 1.20
L1-058/066/076	0.391 ± 0.04	9.94 ± 1.20
L1-150	0.284 ± 0.04	7.22 ± 1.20
L1-170	0.266 ± 0.04	6.74 ± 1.20
L1-380	0.202 ± 0.04	5.13 ± 1.20
L1-430	0.184 ± 0.04	4.68 ± 1.20
$L2 = A - (G - L1) \text{ tolerance } \pm 0.04 \text{ inch (1.0mm)}$		



Ratings and Characteristics Curve

Fig.1 - Test Pulse Waveform

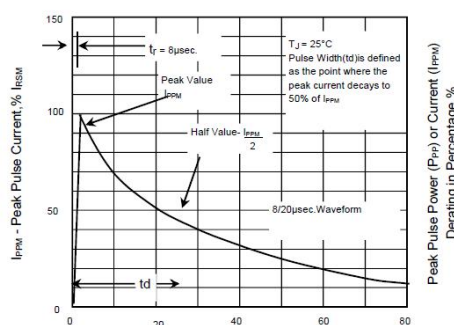


Fig.2 - Pulse Derating Curve

