

# AS30KP26 - AS30KP400A

**V<sub>R</sub> : 26 - 400 Volts**

**P<sub>PK</sub> : 30,000 Watts**

## FEATURES :

- \* Aviation Application
- \* AECQ-101 Qualified
- \* Glass passivated junction chip
- \* Excellent Clamping Capability
- \* Fast Response Time
- \* Low Leakage Current
- \* **Pb / RoHS Free**

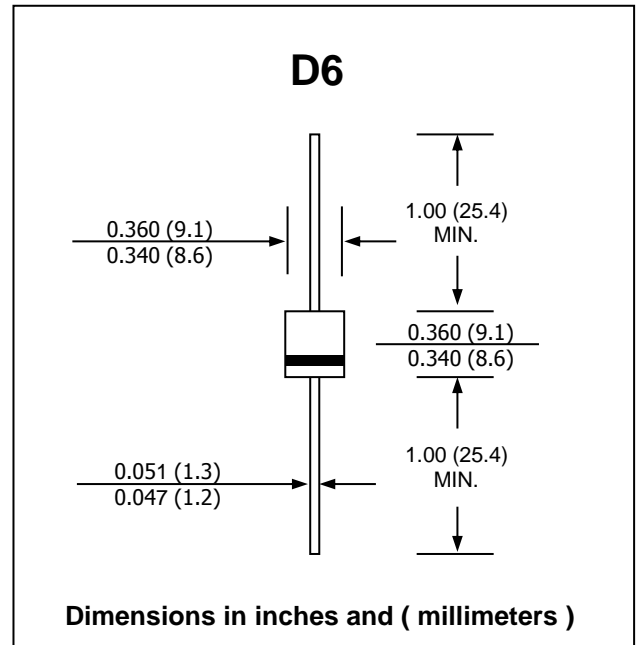
## MECHANICAL DATA

- \* Case : Void-free molded plastic body
- \* Epoxy : UL94V-0 rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202,  
Method 208 guaranteed
- \* Polarity : Color band denotes cathode end except Bipolar.
- \* Mounting position : Any
- \* Weight : 2.1 grams

## MAXIMUM RATINGS (T<sub>a</sub> = 25 °C)

Rating	Symbol	Value	Unit
Peak Pulse Power Dissipation (10 x 1000μs, see Fig.2 )	P <sub>PK</sub>	30,000	W
Steady State Power Dissipation	P <sub>D</sub>	7	W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	- 55 to + 175	°C

## TRANSIENT VOLTAGE SUPPRESSOR



## ELECTRICAL CHARACTERISTICS (Rating at 25 °C ambient temperature unless otherwise specified)

Type No.	Reverse Stand Off Voltage	Breakdown Voltage @ $I_{(BR)}$			Maximum Reverse Leakage @ $V_{WM}$	Maximum Clamping Voltage @ $I_{PP}$	Maximum Peak Pulse Current	Maximum $V_{(BR)}$ Temperature Coefficient
	$V_{WM}$	$V_{BR}$ (V)		$I_{(BR)}$	$I_D$	$V_C$	$I_{PP}$	$\alpha_{V(BR)}$
	(V)	Min.	Max.	(mA)	( $\mu$ A)	(V)	(A)	(mV/°C)
AS30KP26	26	28.9	35.3	50	10000	48.7	616	32
AS30KP26A	26	28.9	31.9	50	10000	44.0	682	29
AS30KP28	28	31.1	38.0	50	8000	52.4	572	35
AS30KP28A	28	31.1	34.4	50	8000	47.5	632	31
AS30KP30	30	33.3	40.7	50	8000	56.2	534	37
AS30KP30A	30	33.3	36.9	50	8000	50.7	592	33
AS30KP33	33	36.7	44.9	50	5000	64.6	496	42
AS30KP33A	33	36.7	40.6	50	5000	58.6	548	38
AS30KP36	36	40.0	48.9	50	5000	68.2	454	46
AS30KP36A	36	40.0	44.2	50	5000	61.8	502	41
AS30KP39	39	43.6	53.2	20	2000	69.1	434	48
AS30KP39A	39	43.6	48.2	20	2000	67.2	451	43
AS30KP40	40	44.4	54.3	20	1500	75.8	412	51
AS30KP40A	40	44.4	49.1	20	1500	68.6	456	46
AS30KP43	43	47.8	58.4	10	500	79.0	380	55
AS30KP43A	43	47.8	52.8	10	500	71.0	430	50
AS30KP45	45	50.0	61.1	5	150	80.7	372	57
AS30KP45A	45	50.0	55.3	5	150	73.0	410	52
AS30KP48	48	53.3	65.1	5	150	85.9	350	62
AS30KP48A	48	53.3	58.9	5	150	77.7	386	56
AS30KP51	51	56.7	69.3	5	50	91.5	328	66
AS30KP51A	51	56.7	62.7	5	50	82.8	362	60
AS30KP54	54	60.0	73.3	5	25	96.8	310	70
AS30KP54A	54	60.0	66.3	5	25	87.5	342	63
AS30KP58	58	64.4	78.7	5	15	104	288	76
AS30KP58A	58	64.4	71.2	5	15	94	320	68
AS30KP60	60	66.7	81.5	5	15	107	280	78
AS30KP60A	60	66.7	73.7	5	15	97.3	304	71
AS30KP64	64	71.1	86.9	5	10	115	260	84
AS30KP64A	64	71.1	78.6	5	10	104	288	76
AS30KP70	70	77.8	95.1	5	10	126	238	92
AS30KP70A	70	77.8	86.0	5	10	114	264	83
AS30KP75	75	83.3	102	5	10	135	222	100
AS30KP75A	75	83.3	92.1	5	10	122	246	89
AS30KP78	78	86.7	106	5	10	140	214	104
AS30KP78A	78	86.7	95.8	5	10	126	238	93
AS30KP85	85	94.4	115	5	10	152	198	113
AS30KP85A	85	94.4	104	5	10	137	218	102
AS30KP90	90	100	122	5	10	160	188	120
AS30KP90A	90	100	111	5	10	146	206	109
AS30KP100	100	111	136	5	10	179	168	134
AS30KP100A	100	111	123	5	10	162	186	121
AS30KP110	110	122	149	5	10	196	154	147
AS30KP110A	110	122	135	5	10	178	168	133
AS30KP120	120	133	163	5	10	214	140	161

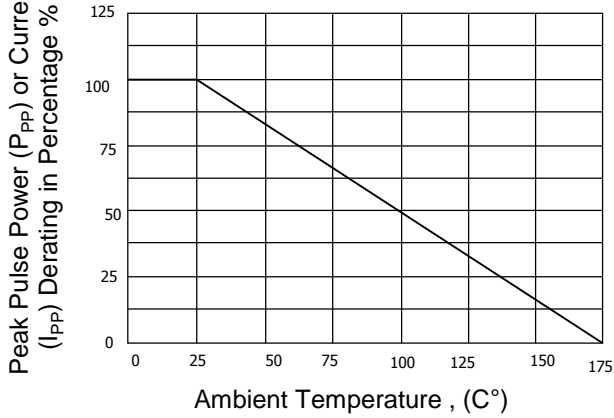
## ELECTRICAL CHARACTERISTICS (Rating at 25 °C ambient temperature unless otherwise specified)

Type No.	Reverse Stand Off Voltage	Breakdown Voltage @ $I_{(BR)}$			Maximum Reverse Leakage @ $V_{WM}$	Maximum Clamping Voltage @ $I_{PP}$	Maximum Peak Pulse Current	Maximum $V_{(BR)}$ Temperature Coefficient
	$V_{WM}$	$V_{BR}$ (V)		$I_{(BR)}$	$I_D$	$V_C$	$I_{PP}$	$\alpha_{V(BR)}$
	(V)	Min.	Max.	(mA)	( $\mu$ A)	(V)	(A)	(mV/°C)
AS30KP120A	120	133	147	5	10	193	156	145
AS30KP130	130	144	176	5	10	231	130	174
AS30KP130A	130	144	159	5	10	209	142	157
AS30KP150	150	167	204	5	10	268	112	202
AS30KP150A	150	167	185	5	10	243	124	183
AS30KP160	160	178	218	5	10	287	104	216
AS30KP160A	160	178	197	5	10	259	116	195
AS30KP170	170	189	231	5	10	304	98	229
AS30KP170A	170	189	209	5	10	275	110	207
AS30KP180	180	200	244	5	10	321	94	242
AS30KP180A	180	200	221	5	10	291	104	219
AS30KP200	200	222	271	5	10	356	84	269
AS30KP200A	200	222	245	5	10	322	94	243
AS30KP220	220	245	299	5	10	393	76	297
AS30KP220A	220	245	271	5	10	356	84	269
AS30KP250	250	278	339	5	10	441	68	334
AS30KP250A	250	278	308	5	10	403	74	306
AS30KP260	260	289	353	5	10	460	65	346
AS30KP260A	260	289	320	5	10	419	71	318
AS30KP280	280	311	379	5	10	498	60	372
AS30KP280A	280	311	345	5	10	451	66	344
AS30KP300	300	333	406	5	10	535	56	396
AS30KP300A	300	333	369	5	10	483	62	368
AS30KP320	320	356	434	5	10	588	51	398
AS30KP320A	320	356	392	5	10	530	57	370
AS30KP350	350	389	475	5	10	637	47	458
AS30KP350A	350	389	431	5	10	564	53	430
AS30KP360	360	400	488	5	10	635	47	408
AS30KP360A	360	400	436	5	10	567	53	380
AS30KP400	400	444	542	5	10	730	41	518
AS30KP400A	400	444	492	5	10	644	46	490

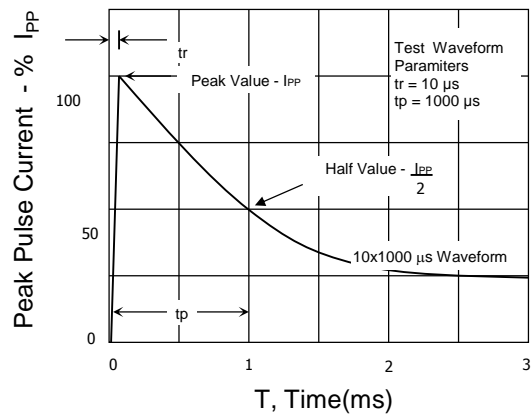
Note : (1) For bidirectional type having  $V_{WM}$  of 60 volts and less, the  $I_D$  limit is double.

**RATING AND CHARACTERISTIC CURVES ( AS30KP26 - AS30KP400A )**

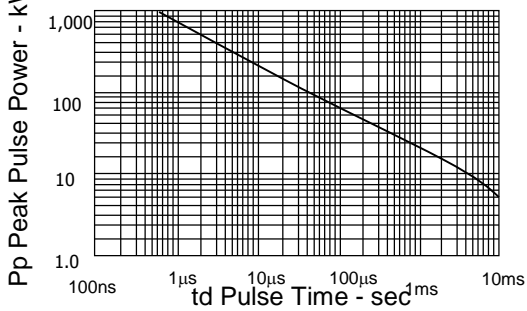
**Fig. 1 - Pulse Derating Curve**



**Fig. 2 - Pulse Wave Form**



**Fig. 3 - Peak Pulse Power vs. Pulse**



**Fig. 4 - Typical Capacitance vs. Breakdown Voltage**

