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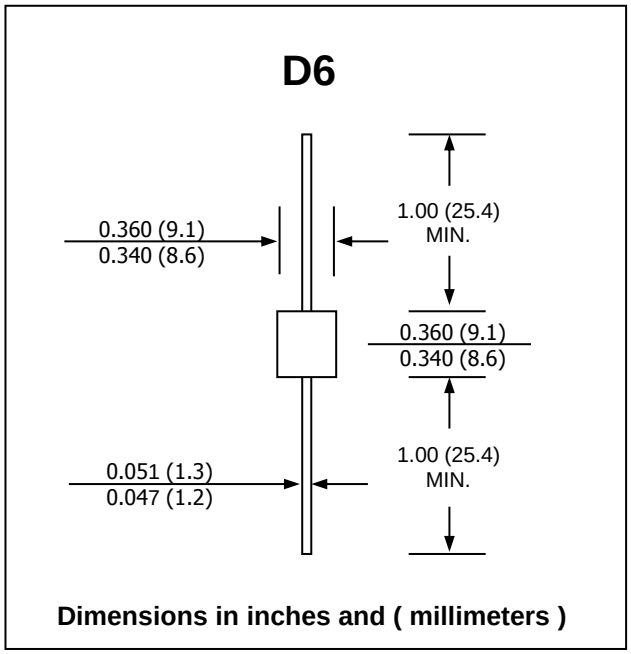
AS30KP26C - AS30KP400CA

BI-DIRECTIONTRANSIENT VOLTAGE SUPPRESSOR

V_R : 26 - 400 Volts

P_{PK} : 30,000 Watts



Dimensions in inches and (millimeters)

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 (Ta = 25 °C)

Rating	Symbol	Value	Unit
Peak Pulse Power Dissipation (10 x 1000μs, see Fig.2)	P_{PK}	30,000	W
Steady State Power Dissipation	P_D	7	W
Operating and Storage Temperature Range	T_J, T_{STG}	- 55 to + 175	°C

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)	(μA)	(V)	(A)	(mV/°C)
AS30KP26C	26	28.9	35.3	50	10000	48.7	616	32
AS30KP26CA	26	28.9	31.9	50	10000	44.0	682	29
AS30KP28C	28	31.1	38.0	50	8000	52.4	572	35
AS30KP28CA	28	31.1	34.4	50	8000	47.5	632	31
AS30KP30C	30	33.3	40.7	50	8000	56.2	534	37
AS30KP30CA	30	33.3	36.9	50	8000	50.7	592	33
AS30KP33C	33	36.7	44.9	50	5000	64.6	496	42
AS30KP33CA	33	36.7	40.6	50	5000	58.6	548	38
AS30KP36C	36	40.0	48.9	50	5000	68.2	454	46
AS30KP36CA	36	40.0	44.2	50	5000	61.8	502	41
AS30KP39C	39	43.6	53.2	20	2000	69.1	434	48
AS30KP39CA	39	43.6	48.2	20	2000	67.2	451	43
AS30KP40C	40	44.4	54.3	20	1500	75.8	412	51
AS30KP40CA	40	44.4	49.1	20	1500	68.6	456	46
AS30KP43C	43	47.8	58.4	10	500	79.0	380	55
AS30KP43CA	43	47.8	52.8	10	500	71.0	430	50
AS30KP45C	45	50.0	61.1	5	150	80.7	372	57
AS30KP45CA	45	50.0	55.3	5	150	73.0	410	52
AS30KP48C	48	53.3	65.1	5	150	85.9	350	62
AS30KP48CA	48	53.3	58.9	5	150	77.7	386	56
AS30KP51C	51	56.7	69.3	5	50	91.5	328	66
AS30KP51CA	51	56.7	62.7	5	50	82.8	362	60
AS30KP54C	54	60.0	73.3	5	25	96.8	310	70
AS30KP54CA	54	60.0	66.3	5	25	87.5	342	63
AS30KP58C	58	64.4	78.7	5	15	104	288	76
AS30KP58CA	58	64.4	71.2	5	15	94	320	68
AS30KP60C	60	66.7	81.5	5	15	107	280	78
AS30KP60CA	60	66.7	73.7	5	15	97.3	304	71
AS30KP64C	64	71.1	86.9	5	10	115	260	84
AS30KP64CA	64	71.1	78.6	5	10	104	288	76
AS30KP70C	70	77.8	95.1	5	10	126	238	92
AS30KP70CA	70	77.8	86.0	5	10	114	264	83
AS30KP75C	75	83.3	102	5	10	135	222	100
AS30KP75CA	75	83.3	92.1	5	10	122	246	89
AS30KP78C	78	86.7	106	5	10	140	214	104
AS30KP78CA	78	86.7	95.8	5	10	126	238	93
AS30KP85C	85	94.4	115	5	10	152	198	113
AS30KP85CA	85	94.4	104	5	10	137	218	102
AS30KP90C	90	100	122	5	10	160	188	120
AS30KP90CA	90	100	111	5	10	146	206	109
AS30KP100C	100	111	136	5	10	179	168	134
AS30KP100CA	100	111	123	5	10	162	186	121
AS30KP110C	110	122	149	5	10	196	154	147
AS30KP110CA	110	122	135	5	10	178	168	133
AS30KP120C	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)	(μA)	(V)	(A)	(mV/°C)
AS30KP120CA	120	133	147	5	10	193	156	145
AS30KP130C	130	144	176	5	10	231	130	174
AS30KP130CA	130	144	159	5	10	209	142	157
AS30KP150C	150	167	204	5	10	268	112	202
AS30KP150CA	150	167	185	5	10	243	124	183
AS30KP160C	160	178	218	5	10	287	104	216
AS30KP160CA	160	178	197	5	10	259	116	195
AS30KP170C	170	189	231	5	10	304	98	229
AS30KP170CA	170	189	209	5	10	275	110	207
AS30KP180C	180	200	244	5	10	321	94	242
AS30KP180CA	180	200	221	5	10	291	104	219
AS30KP200C	200	222	271	5	10	356	84	269
AS30KP200CA	200	222	245	5	10	322	94	243
AS30KP220C	220	245	299	5	10	393	76	297
AS30KP220CA	220	245	271	5	10	356	84	269
AS30KP250C	250	278	339	5	10	441	68	334
AS30KP250CA	250	278	308	5	10	403	74	306
AS30KP260C	260	289	353	5	10	460	65	346
AS30KP260CA	260	289	320	5	10	419	71	318
AS30KP280C	280	311	379	5	10	498	60	372
AS30KP280CA	280	311	345	5	10	451	66	344
AS30KP300C	300	333	406	5	10	535	56	396
AS30KP300CA	300	333	369	5	10	483	62	368
AS30KP320C	320	356	434	5	10	588	51	398
AS30KP320CA	320	356	392	5	10	530	57	370
AS30KP350C	350	389	475	5	10	637	47	458
AS30KP350CA	350	389	431	5	10	564	53	430
AS30KP360C	360	400	488	5	10	635	47	408
AS30KP360CA	360	400	436	5	10	567	53	380
AS30KP400C	400	444	542	5	10	730	41	518
AS30KP400CA	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 (AS30KP26C - AS30KP400CA)

Fig. 1 - Pulse Derating Curve

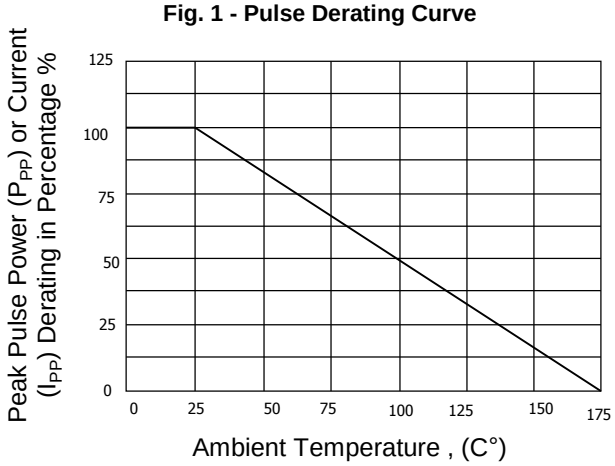


Fig. 2 - Pulse Wave Form

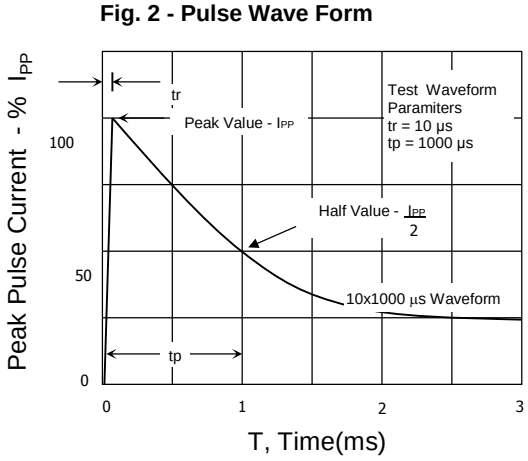


Fig. 3 - Peak Pulse Power vs. Pulse

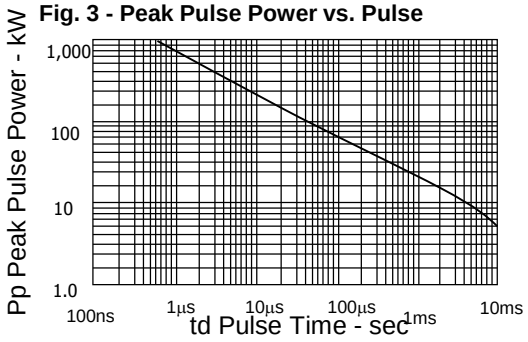


Fig. 4 - Typical Capacitance vs. Breakdown Voltage