

ASR15KP17 - ASR15KP240A

V_R : 17 - 240 Volts

P_{PK} : 15,000 Watts

FEATURES :

- * Aviation Application
- * AEC-Q101 Qualified
- * Glass passivated junction chip
- * Excellent Clamping Capability
- * Fast Response Time
- * Low Zener Impedance
- * Low Leakage Current
- * Fast Response Time : typically less than 1.0ps from 0 volt to BV, Bidirectional less than 10ns
- * High temperature soldering guaranteed : 265°C/10 second, 0.375", (9.5mm) lead length.
- * **Pb / RoHS Free**

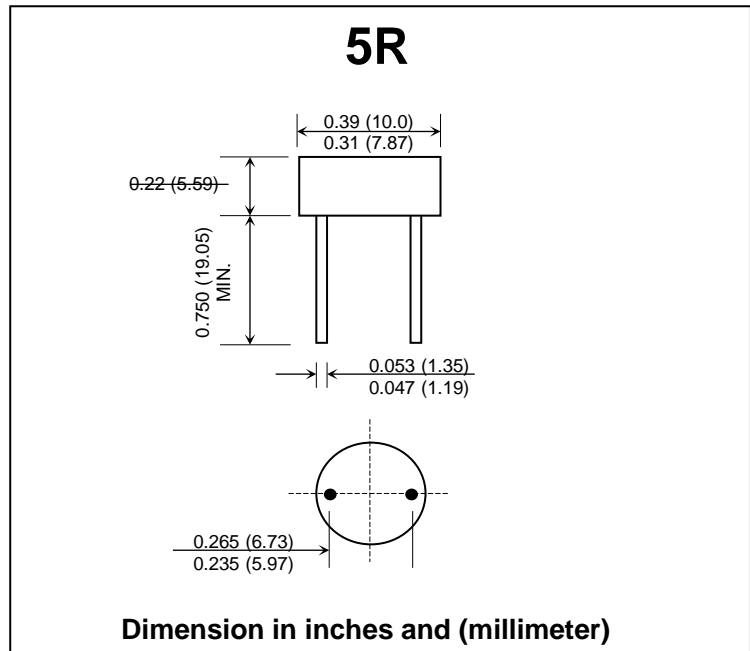
MECHANICAL DATA

- * Case : Reliable low cost construction utilizing molded plastic technique
- * Epoxy : UL94V-0 rate flame retardant
- * Terminals : Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Polarity symbols marked on case
- * Mounting position : Any
- * Weight : 1.29 grams

MAXIMUM RATINGS (T_a = 25°C)

Rating	Symbol	Value	Unit
Peak Pulse Power Dissipation (10X1000μs, see Fig.1)	P _{PK}	15,000	W
Steady State Power Dissipation	P _D	7.0	W
Operating and Storage Temperature Range	T _J , T _{STG}	- 55 to + 175	°C

TRANSIENT VOLTAGE SUPPRESSORS



ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

Type No.	Reverse Stand Off Voltage	Breakdown Voltage @ I _T			Maximum Reverse Leakage @ V _R	Maximum Clamping Voltage @ I _{PP}	Maximum Peak Pulse Current	Max. Voltage Temperature Variation of V _{BR} (mV/°C)
	V _{WM}	V _{BR} (V)		I _T	I _R	V _C	I _{PP}	
	(V)	Min.	Max.	(mA)	(μA)	(V)	(A)	
ASR15KP17	17	18.9	23.1	50	5,000	32.2	464	19
ASR15KP17A	17	18.9	20.9	50	5,000	29.3	512	17
ASR15KP18	18	20.0	24.4	50	5,000	34.2	439	20
ASR15KP18A	18	20.0	22.1	50	5,000	30.9	485	18
ASR15KP20	20	22.2	27.1	20	1,500	37.9	396	24
ASR15KP20A	20	22.2	24.5	20	1,500	34.3	437	21
ASR15KP22	22	24.4	29.8	10	500	41.1	365	27
ASR15KP22A	22	24.4	26.9	10	500	37.1	404	24
ASR15KP24	24	26.7	32.6	5.0	150	45.0	333	30
ASR15KP24A	24	26.7	29.5	5.0	150	40.7	369	27
ASR15KP26	26	28.9	35.3	5.0	50	48.7	308	32
ASR15KP26A	26	28.9	31.9	5.0	50	44.0	341	29
ASR15KP28	28	31.1	38.0	5.0	25	52.4	286	35
ASR15KP28A	28	31.1	34.4	5.0	25	47.5	316	31
ASR15KP30	30	33.3	40.7	5.0	15	56.2	267	37
ASR15KP30A	30	33.3	36.8	5.0	15	50.7	296	33
ASR15KP33	33	36.7	44.9	5.0	10	60.6	248	42
ASR15KP33A	33	36.7	40.6	5.0	10	54.8	274	38
ASR15KP36	36	40.0	48.9	5.0	10	66.0	227	46
ASR15KP36A	36	40.0	44.2	5.0	10	59.7	251	41
ASR15KP40	40	44.4	54.3	5.0	10	72.8	206	51
ASR15KP40A	40	44.4	49.1	5.0	10	65.8	228	46
ASR15KP43	43	47.8	58.4	5.0	10	77.1	195	55
ASR15KP43A	43	47.8	52.8	5.0	10	69.7	215	50
ASR15KP45	45	50.0	61.1	5.0	10	80.7	186	57
ASR15KP45A	45	50.0	55.3	5.0	10	73.0	205	52
ASR15KP48	48	53.3	65.1	5.0	10	85.9	175	62
ASR15KP48A	48	53.3	58.9	5.0	10	77.7	193	56
ASR15KP51	51	56.7	69.3	5.0	10	91.5	164	66
ASR15KP51A	51	56.7	62.7	5.0	10	82.5	181	60
ASR15KP54	54	60.0	73.3	5.0	10	96.8	155	70
ASR15KP54A	54	60.0	66.3	5.0	10	87.5	171	63
ASR15KP58	58	64.4	78.7	5.0	10	104	144	76
ASR15KP58A	58	64.4	71.2	5.0	10	94	160	68
ASR15KP60	60	66.7	81.5	5.0	10	107	140	78
ASR15KP60A	60	66.7	73.7	5.0	10	97.3	154	70
ASR15KP64	64	71.1	86.9	5.0	10	115	130	84
ASR15KP64A	64	71.1	78.6	5.0	10	104	144	76
ASR15KP70	70	77.8	95.1	5.0	10	126	119	92
ASR15KP70A	70	77.8	86.0	5.0	10	114	132	83
ASR15KP75	75	83.3	102	5.0	10	135	111	100
ASR15KP75A	75	83.3	92.1	5.0	10	122	123	89
ASR15KP78	78	86.7	106	5.0	10	140	107	104
ASR15KP78A	78	86.7	95.8	5.0	10	126	119	93

ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

Type No.	Reverse Stand Off Voltage	Breakdown Voltage @ I_T			Maximum Reverse Leakage @ V_R	Maximum Clamping Voltage @ I_{PP}	Maximum Peak Pulse Current	Max. Voltage Temperature Variation of V_{BR} (mV/°C)
	V_{WM}	V_{BR} (V)		I_T	I_R	V_C	I_{PP}	
	(V)	Min.	Max.	(mA)	(μ A)	(V)	(A)	
ASR15KP85	85	94.4	115	5.0	10	152	99	113
ASR15KP85A	85	94.4	104	5.0	10	137	109	102
ASR15KP90	90	100	122	5.0	10	160	94	120
ASR15KP90A	90	100	111	5.0	10	146	103	110
ASR15KP100	100	111	136	5.0	10	179	84	134
ASR15KP100A	100	111	123	5.0	10	162	93	123
ASR15KP110	110	122	149	5.0	10	196	77	147
ASR15KP110A	110	122	135	5.0	10	178	84	133
ASR15KP120	120	133	163	5.0	10	214	70	161
ASR15KP120A	120	133	147	5.0	10	193	78	146
ASR15KP130	130	144	176	5.0	10	231	65	174
ASR15KP130A	130	144	159	5.0	10	209	72	158
ASR15KP150	150	167	204	5.0	10	268	56	202
ASR15KP150A	150	167	185	5.0	10	243	62	184
ASR15KP160	160	178	218	5.0	10	287	52	216
ASR15KP160A	160	178	197	5.0	10	259	58	196
ASR15KP170	170	189	231	5.0	10	304	49	229
ASR15KP170A	170	189	209	5.0	10	275	55	208
ASR15KP180	180	200	244	5.0	10	321	47	242
ASR15KP180A	180	200	221	5.0	10	287	52	220
ASR15KP200	200	222	271	5.0	10	356	42	296
ASR15KP200A	200	222	245	5.0	10	325	46	274
ASR15KP220	220	245	299	5.0	10	393	38	297
ASR15KP220A	220	245	271	5.0	10	347	43	273
ASR15KP240	240	267	326	5.0	10	428	35	324
ASR15KP240A	240	267	295	5.0	10	387	39	300

Note: (1) Suffix " A " denotes 5% tolerance device , no suffix denotes a 10% tolerance device.

RATING AND CHARACTERISTIC CURVES (ASR15KP17 - ASR15KP240A)

Fig. 1 - Pulse Wave Form

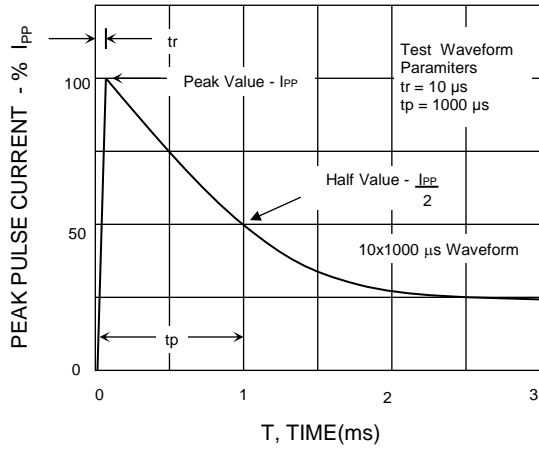


Fig. 2 - Peak Pulse Power vs. Pulse Time

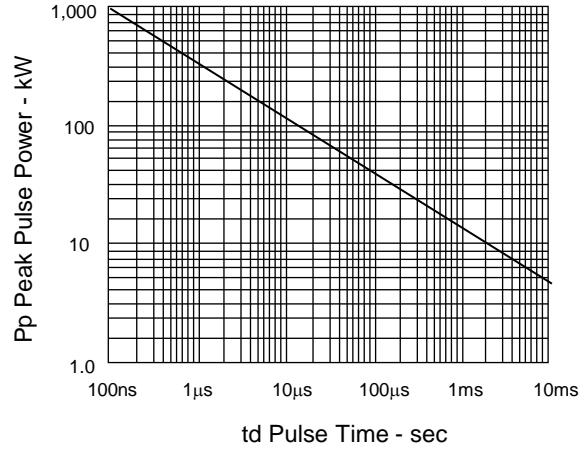


Fig. 3 - Typical Capacitance vs. Breakdown Voltage

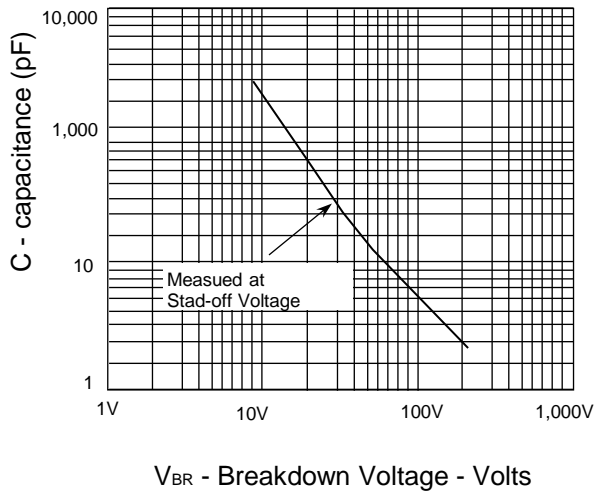


Fig. 4 - Derating Curve

