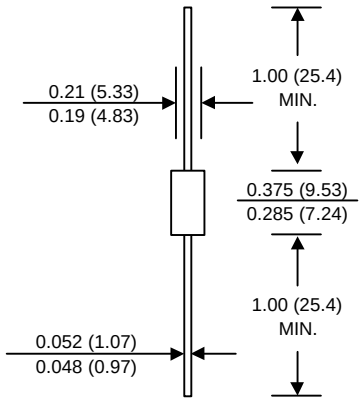
www.eicsemi.com

1N6267C - 1N6303CA

BIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSOR

V_{BR} : 6.8 - 200 Volts
P_{PK} : 1500 Watts

DO-201



Dimensions in inches and (millimeters)

FEATURES :

* 1500W surge capability at 1ms
* Excellent clamping capability
* Low zener impedance
* Fast response time : typically less then 1.0 ps from 0 volt to $V_{BR(min.)}$
* Typical I_R less then 1μA above 10V
* Pb / RoHS Free

MECHANICAL DATA

* Case : DO-201 Molded plastic
* Epoxy : UL94V-O rate flame retardant
* Lead : Axial lead solderable per MIL-STD-202, method 208 guaranteed
* Mounting position : Any
* Weight : 0.93 gram

DEVICES FOR UNIPOLAR APPLICATIONS

For uni-directional without "C"
Electrical characteristics apply in both directions

MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified.

Rating	Symbol	Value	Unit
Peak Power Dissipation at Ta = 25 °C, Tp=1ms (Note1)	P_{PK}	1500	W
Steady State Power Dissipation at T_L = 75 °C Lead Lengths 0.375", (9.5mm) (Note 2)	P_D	5.0	W
Operating and Storage Temperature Range	T_J, T_{STG}	- 65 to + 175	°C

Note :

(1) Non-repetitive Current pulse, per Fig. 2 and derated above Ta = 25 °C per Fig. 1
(2) Mounted on Copper Lead area of 1.57 in^2 (40mm^2).

Downloaded from Arrow.com.

ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

TYPE	Breakdown Voltage @ It (Note 1)			Working Peak Reverse Voltage	Maximum Reverse Leakage @ V_{RWM}	Maximum Reverse Current	Maximum Clamping Voltage @ I_{RSM}	Maximum Temperature Co-efficient of V_{BR}
	V_{BR} (V)		It	V_{RWM}	I_R	I_{RSM}	V_{RSM}	
	Min.	Max.	(mA)	(V)	(μA)	(A)	(V)	(% / °C)
1N6267C	6.12	7.48	10	5.50	2000	139	10.8	0.057
1N6267CA	6.45	7.14	10	5.80	2000	143	10.5	0.057
1N6268C	6.75	8.25	10	6.05	1000	128	11.7	0.061
1N6268CA	7.13	7.88	10	6.40	1000	132	11.3	0.061
1N6269C	7.38	9.02	10	6.63	400	120	12.5	0.065
1N6269CA	7.79	8.61	10	7.02	400	124	12.1	0.065
1N6270C	8.19	10.0	1.0	7.37	100	109	13.8	0.068
1N6270CA	8.65	9.55	1.0	7.78	100	112	13.4	0.068
1N6271C	9.00	11.0	1.0	8.10	10	100	15.0	0.073
1N6271CA	9.50	10.5	1.0	8.55	10	103	14.5	0.073
1N6272C	9.90	12.1	1.0	8.92	10	93.0	16.2	0.075
1N6272CA	10.5	11.6	1.0	9.40	10	96.0	15.6	0.075
1N6273C	10.8	13.2	1.0	9.72	5.0	87.0	17.3	0.078
1N6273CA	11.4	12.6	1.0	10.2	5.0	90.0	16.7	0.078
1N6274C	11.7	14.3	1.0	10.5	5.0	79.0	19.0	0.081
1N6274CA	12.4	13.7	1.0	11.1	5.0	82.0	18.2	0.081
1N6275C	13.5	16.5	1.0	12.1	5.0	68.0	22.0	0.084
1N6275CA	14.3	15.8	1.0	12.8	5.0	71.0	21.2	0.084
1N6276C	14.4	17.6	1.0	12.9	5.0	64.0	23.5	0.086
1N6276CA	15.2	16.8	1.0	13.6	5.0	67.0	22.5	0.086
1N6277C	16.2	19.8	1.0	14.5	5.0	56.5	26.5	0.088
1N6277CA	17.1	18.9	1.0	15.3	5.0	59.5	25.2	0.088
1N6278C	18.0	22.0	1.0	16.2	5.0	51.5	29.1	0.090
1N6278CA	19.0	21.0	1.0	17.1	5.0	54.0	27.7	0.090
1N6279C	19.8	24.2	1.0	17.8	5.0	47.0	31.9	0.092
1N6279CA	20.9	23.1	1.0	18.8	5.0	49.0	30.6	0.092
1N6280C	21.6	26.4	1.0	19.4	5.0	43.0	34.7	0.094
1N6280CA	22.8	25.2	1.0	20.5	5.0	45.0	33.2	0.094
1N6281C	24.3	29.7	1.0	21.8	5.0	38.5	39.1	0.096
1N6281CA	25.7	28.4	1.0	23.1	5.0	40.0	37.5	0.096
1N6282C	27.0	33.0	1.0	24.3	5.0	34.5	43.5	0.097
1N6282CA	28.5	31.5	1.0	25.6	5.0	36.0	41.4	0.097
1N6283C	29.7	36.3	1.0	26.8	5.0	31.5	47.7	0.098
1N6283CA	31.4	34.7	1.0	28.2	5.0	33.0	45.7	0.098
1N6284C	32.4	39.6	1.0	29.1	5.0	29.0	52.0	0.099
1N6284CA	34.2	37.8	1.0	30.8	5.0	30.0	49.9	0.099
1N6285C	35.1	42.9	1.0	31.6	5.0	26.5	56.4	0.100
1N6285CA	37.1	41.0	1.0	33.3	5.0	28.0	53.9	0.100
1N6286C	38.7	47.3	1.0	34.8	5.0	24.0	61.9	0.101
1N6286CA	40.9	45.2	1.0	36.8	5.0	25.3	59.3	0.101
1N6287C	42.3	51.7	1.0	38.1	5.0	22.2	67.8	0.101
1N6287CA	44.7	49.4	1.0	40.2	5.0	23.2	64.8	0.101
1N6288C	45.9	56.1	1.0	41.3	5.0	20.4	73.5	0.102
1N6288CA	48.5	53.6	1.0	43.6	5.0	21.4	70.1	0.102

ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

TYPE	Breakdown Voltage @ It (Note 1)			Working Peak Reverse Voltage	Maximum Reverse Leakage @ V_{RWM}	Maximum Reverse Current	Maximum Clamping Voltage @ I_{RSM}	Maximum Temperature Co-efficient of V_{BR}
	V_{BR} (V)		It	V_{RWM}	I_R	I_{RSM}	V_{RSM}	
	Min.	Max.	(mA)	(V)	(μA)	(A)	(V)	(% / °C)
1N6289C	50.4	61.6	1.0	45.4	5.0	18.6	80.5	0.103
1N6289CA	53.2	58.8	1.0	47.8	5.0	19.5	77.0	0.103
1N6290C	55.8	68.2	1.0	50.2	5.0	16.9	89.0	0.104
1N6290CA	58.9	65.1	1.0	53.0	5.0	17.7	85.0	0.104
1N6291C	61.2	74.8	1.0	55.1	5.0	15.3	98.0	0.104
1N6291CA	64.6	71.4	1.0	58.1	5.0	16.3	92.0	0.104
1N6292C	67.5	82.5	1.0	60.7	5.0	13.9	108	0.105
1N6292CA	71.3	78.8	1.0	64.1	5.0	14.6	103	0.105
1N6293C	73.8	90.2	1.0	66.4	5.0	12.7	118	0.105
1N6293CA	77.9	86.1	1.0	70.1	5.0	13.3	113	0.105
1N6294C	81.9	100	1.0	73.7	5.0	11.4	131	0.106
1N6294CA	86.5	95.5	1.0	77.8	5.0	12.0	125	0.106
1N6295C	90.0	110	1.0	81.0	5.0	10.4	144	0.106
1N6295CA	95.0	105	1.0	85.5	5.0	11.0	137	0.106
1N6296C	99.0	121	1.0	89.2	5.0	9.5	158	0.107
1N6296CA	105	116	1.0	94.0	5.0	9.9	152	0.107
1N6297C	108	132	1.0	97.2	5.0	8.7	173	0.107
1N6297CA	114	126	1.0	102	5.0	9.1	165	0.107
1N6298C	117	143	1.0	105	5.0	8.0	187	0.107
1N6298CA	124	137	1.0	111	5.0	8.4	179	0.107
1N6299C	135	165	1.0	121	5.0	7.0	215	0.108
1N6299CA	143	158	1.0	128	5.0	7.2	207	0.108
1N6300C	144	176	1.0	130	5.0	6.5	230	0.108
1N6300CA	152	168	1.0	136	5.0	6.8	219	0.108
1N6301C	153	187	1.0	138	5.0	6.2	244	0.108
1N6301CA	162	179	1.0	145	5.0	6.4	234	0.108
1N6302C	162	198	1.0	146	5.0	5.8	258	0.108
1N6302CA	171	189	1.0	154	5.0	6.1	246	0.108
1N6303C	180	220	1.0	162	5.0	5.2	287	0.108
1N6303CA	190	210	1.0	171	5.0	5.5	274	0.108

Note:

(1) V_{BR} measured after It applied for 300 μs., It = square wave pulse or equivalent.

RATING AND CHARACTERISTIC CURVES (1N6267C - 1N6303CA)

FIG.1 - PULSE DERATING CURVE

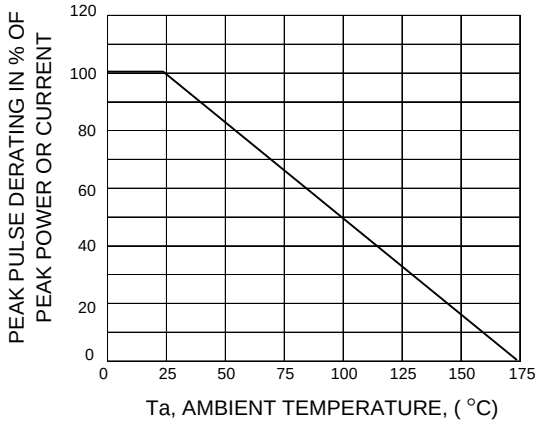


FIG.2 - PULSE WAVEFORM

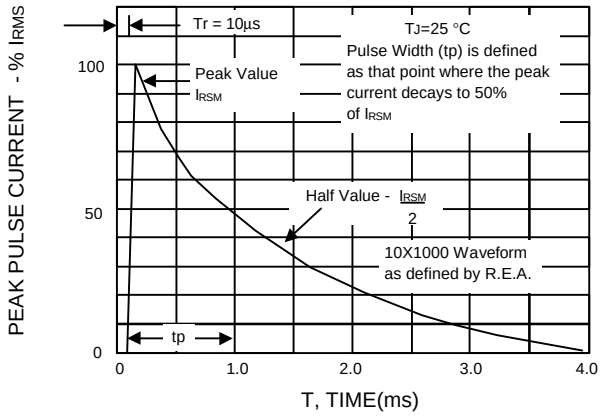


FIG.3 - STEADY STATE POWER DERATING

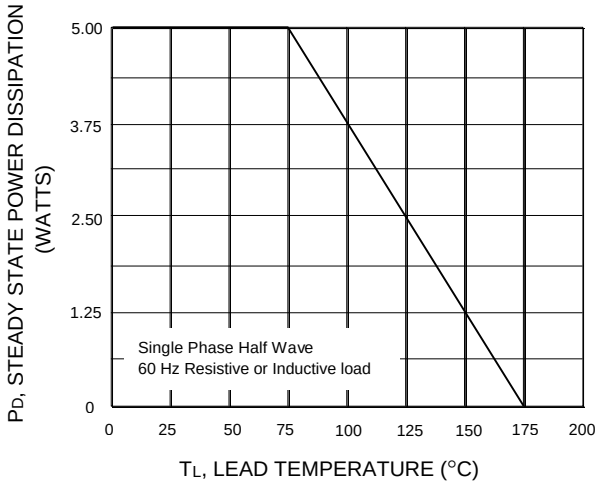
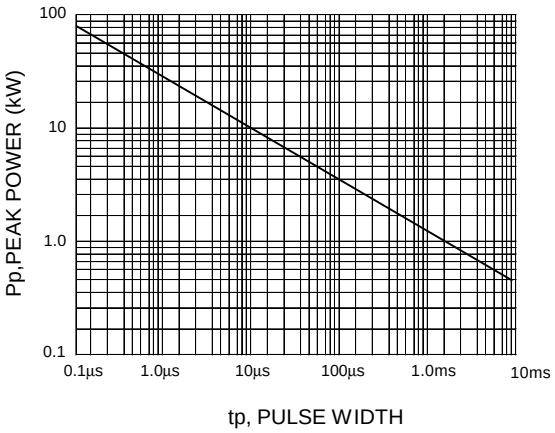


FIG.4 - PULSE RATING CURVE



Downloaded from Arrow.com.