

TECHNICAL DATA
DATA SHEET 5345, REV. -

500W Transient Voltage Suppressor Diode Chip/Die

- Operating and Storage Temperature: -55°C to +175°C

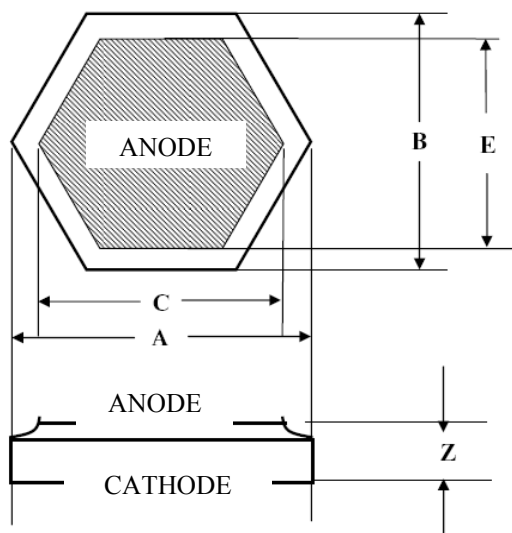
SERIES TYPE	MIN BREAKDOWN VOLTAGE $V_{(BR)}$ @ $I_{(BR)}$		WORKING PEAK REVERSE VOLTAGE VRWM	MAXIMUM REVERSE CURRENT I_{R1}	MAX. CLAMP. VOLTAGE VC @ I_P tp = 1ms	MAX. PEAK PULSE CURRENT I_P	MAX. TEMP. COEFFICIENT $V_{(BR)}$
	Vdc	mA dc					
500W	Vdc	mA dc	Vdc	μ Adc	V(pk)	A(pk)	% / °C
1C6103A	7.13	175	5.7	50	11.2	44.6	.06
1C6104	7.38	150	6.2	20	12.7	39.0	.06
1C6104A	7.79	150	6.2	20	12.1	41.3	.06
1C6105	8.19	150	6.9	20	14	35.7	0.06
1C6105A	8.65	150	6.9	20	13.4	37.3	0.06
1C6106	9	125	7.6	20	15.2	32.9	0.07
1C6106A	9.5	125	7.6	20	14.5	34.5	0.07
1C6107	9.9	125	8.4	20	16.3	30.7	0.07
1C6107A	10.45	125	8.4	20	15.6	32.0	0.07
1C6108	10.8	100	9.1	20	17.7	28.2	0.07
1C6108A	11.4	100	9.1	20	16.9	29.6	0.07
1C6109	11.7	100	9.9	20	19	26.3	0.08
1C6109A	12.35	100	9.9	20	18.2	27.5	0.08
1C6110	13.5	75	11.4	20	21.9	22.8	0.08
1C6110A	14.25	75	11.4	20	21	23.8	0.08
1C6111	14.4	75	12.2	20	23.4	21.4	0.08
1C6111A	15.2	75	12.2	20	22.3	22.4	0.08
1C6112	16.2	65	13.7	1	26.3	19.0	0.085
1C6112A	17.1	65	13.7	1	25.1	19.9	0.085
1C6113	18	65	15.2	1	29	17.2	0.085
1C6113A	19	65	15.2	1	27.7	18.0	0.085
1C6114	19.8	50	16.7	1	31.9	15.7	0.085
1C6114A	20.9	50	16.7	1	30.5	16.4	0.085
1C6115	21.6	50	18.2	1	34.8	14.4	0.09
1C6115A	22.8	50	18.2	1	33.3	15.0	0.09
1C6116	24.3	50	20.6	1	39.2	12.8	0.09
1C6116A	25.7	50	20.6	1	37.4	13.4	0.09
1C6117	27	40	22.8	1	43.6	11.5	0.09
1C6117A	28.5	40	22.8	1	41.6	12.0	0.09
1C6118	29.7	40	25.1	1	47.9	10.4	0.095
1C6118A	31.4	40	25.1	1	45.7	10.9	0.095
1C6119	32.4	30	27.4	1	52.3	9.6	0.095
1C6119A	34.2	30	27.4	1	49.9	10.0	0.095
1C6120	35.1	30	29.7	1	56.2	8.9	0.095
1C6120A	37.1	30	29.7	1	53.6	9.3	0.095
1C6121	38.7	30	32.7	1	62	8.1	0.095
1C6121A	40.9	30	32.7	1	59.1	8.5	0.095
1C6122	42.3	25	35.8	1	67.7	7.4	0.095
1C6122A	44.7	25	35.8	1	64.6	7.7	0.095
1C6123	45.9	25	38.8	1	73.5	6.8	0.095
1C6123A	48.5	25	38.8	1	70.1	7.1	0.095
1C6124	50.4	20	42.6	1	80.7	6.2	0.095
1C6124A	53.2	20	42.6	1	77	6.5	0.095

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	Vdc	mA dc					
500W	Vdc	mA dc	Vdc	μ A dc	V(pk)	A(pk)	% / °C
1C6125	55.8	20	47.1	1	89.3	5.6	0.1
1C6125A	58.9	20	47.1	1	85.3	5.9	0.1
1C6126	61.2	20	51.7	1	98	5.1	0.1
1C6126A	64.6	20	51.7	1	97.1	5.1	0.1
1C6127	67.5	20	56	1	108.1	4.6	0.1
1C6127A	71.3	20	56	1	103.1	4.8	0.1
1C6128	73.8	15	62.2	1	118.2	4.2	0.1
1C6128A	77.9	15	62.2	1	112.8	4.4	0.1
1C6129A	86.5	15	69.2	1	125.1	4	0.1
1C6130	90	12	76	1	144.1	3.5	0.1
1C6130A	95	12	76	1	137.6	3.6	0.1
1C6131	99	12	83.6	1	158.5	3.2	0.1
1C6131A	104.5	12	83.6	1	151.3	3.3	0.1
1C6132	108	10	91.2	1	172.9	2.9	0.1
1C6132A	114	10	91.2	1	165.1	3	0.1
1C6133	117	10	98.8	1	187.3	2.7	0.105
1C6133A	123.5	10	98.8	1	178.8	2.8	0.105
1C6134	135	8	114	1	216.2	2.3	0.105
1C6134A	142.5	8	114	1	206.3	2.4	0.105
1C6135	144	8	121.6	1	228.8	2.2	0.105
1C6135A	152	8	121.6	1	218.4	2.3	0.105
1C6136	162	5	136.8	1	257.4	1.9	0.11
1C6136A	171	5	136.8	1	245.7	2	0.11
1C6137	180	5	152	1	286	1.7	0.11
1C6137A	190	5	152	1	273	1.8	0.11

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Mechanical Dimensions: inches



Standard Metallization: Top side: Al; 25 kÅ minimum
Bottom side: Ti/Ni/Ag; 30 kÅ minimum

Gold Option Available for Top and/or Bottom Metallization:
Ti (1.2 kA) / Ni (1.8 kA) / Au (12kA)

Reversed polarity option available

	Die Diameter A	Die Flat to Flat B	Metal Diameter C	Metal Flat to Flat E	Die Thickness Z
500W TVS and 5 W Zener	0.090 ± 0.003 (2.286 ± 0.076)	0.079 ± 0.003 (2.006 ± 0.076)	0.072 ± 0.003 (1.829 ± 0.076)	0.062 ± 0.003 (1.575 ± 0.076)	0.010 ± 0.001 (0.254 ± 0.025)

PART ORDERING INFORMATION

Default part number is Al top, Ag bottom.

Add the following suffix for these metal combinations:

Suffix	Top	Bottom	Part Number
	Al	Ag	1C6104
AG	Al	Au	1C6104AG
BB	Ag	Ag	1C6104BB
BG	Ag	Au	1C6104BG
GG	Au	Au	1C6104GG
GB	Au	Ag	1C6104GB
-R	- Reverse polarity -		1C6104-R

A = Ti (0.3 kA) / Al (25 kA)

B = Ti (1.2 kA) / Ni (1.8 kA) / Ag (30kA)

G = Ti (1.2 kA) / Ni (1.8 kA) / Au (12kA) (**TOP**) / Ti (1.2 kA) / Ni (1.8 kA) / Au (4kA) (**BOTTOM**)

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