

**SENSITRON****SEMICONDUCTOR****AXIAL LEAD / MELF, TRANSIENT VOLTAGE SUPPRESSOR BI- DIRECTIONAL DIODES**

Peak Pulse Power	Unidirectional Chip	 AXIAL	 MELF
500 W	1C6102 - 1C6137 1C6102A - 1C6137A 1C6461 – 1C6468	1N6102 - 1N6137 1N6102A - 1N6137A 1N6461 – 1N6468	1N6102US - 1N6137US 1N6102AUS - 1N6137AUS 1N6461US – 1N6468US

TRANSIENT VOLTAGE SUPPRESSORS, 500W SERIES

SERIES TYPE	BREAK-DOWN VOLTAGE I_{BR}	TEST CURRENT I_T	WORKING PEAK REVERSE VOLTAGE V_{RWM}	MAXIMUM REVERSE CURRENT I_{R1}	MAX. CLAMP. VOLTAGE $V_C(max)$ @ I_P $t_p = 1ms$	MAX. PEAK PULSE CURRENT I_P	MAX. TEMP. COEFFICIENT V_{BR}	MAX. REVERSE CURRENT @ $T_A = 150^\circ C$	PACKAGE STYLE
500W	Min. Vdc	mA dc	Vdc	μA dc	V(pk)	A(pk)	% / °C	μA dc	
1N6102	6.12	175	5.2	100	11.0	45.4	.05	4,000	 
1N6103	6.75	175	5.7	50	11.8	42.4	.06	750	
1N6104	7.38	150	6.2	20	12.7	39.4	.06	500	
1N6105	8.19	150	6.9	20	14.0	35.7	.06	300	
1N6106	9.00	125	7.6	20	15.2	32.9	.07	200	
1N6107	9.90	125	8.4	20	16.3	30.7	.07	200	
1N6108	10.80	100	9.1	20	17.7	28.2	.07	150	
1N6109	11.70	100	9.9	20	19.0	26.3	.08	150	
1N6110	13.50	75	11.4	20	21.9	22.8	.08	100	
1N6111	14.40	75	12.2	20	23.4	21.4	.08	100	
1N6112	16.20	65	13.7	1.0	26.3	19.0	.085	100	
1N6113	18.00	65	15.2	1.0	29.0	17.2	.085	100	
1N6114	19.8	50	16.7	1.0	31.9	15.7	.085	100	
1N6115	21.6	50	18.2	1.0	34.8	14.4	.09	100	
1N6116	24.3	50	20.6	1.0	39.2	12.8	.09	100	
1N6117	27.0	40	22.8	1.0	43.6	11.5	.09	100	
1N6118	29.7	40	25.1	1.0	47.9	10.4	.095	100	
1N6119	32.4	30	27.4	1.0	52.3	9.6	.095	100	
1N6120	35.1	30	29.7	1.0	56.2	8.9	.095	100	
1N6121	38.7	30	32.7	1.0	62.0	8.1	.095	100	
1N6122	42.3	25	35.8	1.0	67.7	7.4	.095	100	
1N6123	45.9	25	38.8	1.0	73.5	6.8	.095	100	
1N6124	50.4	20	42.6	1.0	80.7	6.2	.095	100	
1N6125	55.8	20	47.1	1.0	89.3	5.6	.100	100	
1N6126	61.2	20	51.7	1.0	98.0	5.1	.100	100	
1N6127	67.5	20	56.0	1.0	108.1	4.6	.100	100	
1N6128	73.8	15	62.2	1.0	118.2	4.2	.100	100	
1N6129	81.9	15	69.2	1.0	131.1	3.8	.100	100	
1N6130	90.0	12	76.0	1.0	144.1	3.5	.100	100	
1N6131	99.0	12	83.6	1.0	158.5	3.2	.100	100	
1N6132	108.0	10	91.2	1.0	172.9	2.9	.100	100	
1N6133	117.0	10	98.8	1.0	187.3	2.7	.105	100	
1N6134	135.0	8.0	114.0	1.0	216.2	2.3	.105	100	
1N6135	144.0	8.0	121.6	1.0	228.8	2.2	.105	100	
1N6136	162.0	5.0	136.8	1.0	257.4	1.9	.110	100	
1N6137	180.0	5.0	152.0	1.0	286.0	1.7	.110	100	

(Transient Voltage Suppressors, Continued on the Next Page)



SENSITRON

SEMICONDUCTOR

AXIAL LEAD / MELF, TRANSIENT VOLTAGE SUPPRESSOR BI DIRECTIONAL DIODES

TRANSIENT VOLTAGE SUPPRESSORS, 500W SERIES

SERIES TYPE	BREAK-DOWN VOLTAGE V_{BR}	TEST CURRENT I_{BR}	WORKING PEAK REVERSE VOLTAGE V_{RWM}	MAXIMUM REVERSE CURRENT I_{R1}	MAX. CLAMP. VOLTAGE $V_C(max)$ @ I_P $t_p = 1ms$	MAX. PEAK PULSE CURRENT I_P	MAX. TEMP. COEFFICIENT $T_{V(BR)}$	MAX. REVERSE CURRENT @ $T_A = 150^\circ C$	PACKAGE STYLE
500W	Min. Vdc	mA dc	Vdc	μA_{dc}	V(pk)	A(pk)	% / $^\circ C$	μA_{dc}	
1N6102A	6.46	175	5.2	100	10.5	47.6	.05	4,000	
1N6103A	7.13	175	5.7	50	11.2	44.6	.06	750	
1N6104A	7.79	150	6.2	20	12.1	41.3	.06	500	
1N6105A	8.65	150	6.9	20	13.4	37.3	.06	300	
1N6106A	9.50	125	7.6	20	14.5	34.5	.07	200	
1N6107A	10.45	125	8.4	20	15.6	32.0	.07	200	
1N6108A	11.40	100	9.1	20	16.9	29.6	.07	150	
1N6109A	12.35	100	9.9	20	18.2	27.5	.08	150	
1N6110A	14.25	75	11.4	20	21.0	23.8	.08	100	
1N6111A	15.20	75	12.2	20	22.3	22.4	.08	100	
1N6112A	17.10	65	13.7	1.0	25.1	19.9	.085	100	
1N6113A	19.00	65	15.2	1.0	27.7	18.0	.085	100	
1N6114A	20.9	50	16.7	1.0	30.5	16.4	.085	100	
1N6115A	22.8	50	18.2	1.0	33.3	15.0	.09	100	
1N6116A	25.7	50	20.6	1.0	37.4	13.4	.09	100	
1N6117A	28.5	40	22.8	1.0	41.6	12.0	.09	100	
1N6118A	31.4	40	25.1	1.0	45.7	10.9	.095	100	
1N6119A	34.2	30	27.4	1.0	49.9	10.0	.095	100	
1N6120A	37.1	30	29.7	1.0	53.6	9.3	.095	100	
1N6121A	40.9	30	32.7	1.0	59.1	8.5	.095	100	
1N6122A	44.7	25	35.8	1.0	64.6	7.7	.095	100	
1N6123A	48.5	25	38.8	1.0	70.1	7.1	.095	100	
1N6124A	53.2	20	42.6	1.0	77.0	6.5	.095	100	
1N6125A	58.9	20	47.1	1.0	85.3	5.9	.100	100	
1N6126A	64.6	20	51.7	1.0	97.1	5.1	.100	100	
1N6127A	71.3	20	56.0	1.0	103.1	4.8	.100	100	
1N6128A	77.9	15	62.2	1.0	112.8	4.4	.100	100	
1N6129A	86.5	15	69.2	1.0	125.1	4.0	.100	100	
1N6130A	95.0	12	76.0	1.0	137.6	3.6	.100	100	
1N6131A	104.5	12	83.6	1.0	151.3	3.3	.100	100	
1N6132A	114.0	10	91.2	1.0	165.1	3.0	.100	100	
1N6133A	123.5	10	98.8	1.0	178.8	2.8	.105	100	
1N6134A	142.5	8.0	114.0	1.0	206.3	2.4	.105	100	
1N6135A	152	8.0	121.6	1.0	218.4	2.3	.105	100	
1N6136A	171	5.0	136.8	1.0	245.7	2.0	.110	100	
1N6137A	190	5.0	152.0	1.0	273.0	1.8	.110	100	

Notes:

$P_R = 2W$ for 500W peak pulse power devices $T_A = +25^\circ C$.

$P_R = 3W$ for 500W peak pulse power devices $T_L = +75^\circ C$ for $L = 0.375$ inch (9.53mm).

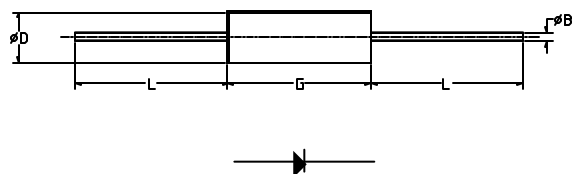
$P_{PR} = 500W$ 1N6102 through 1N6137 including A and US suffix versions at $t_p = 1ms$.

$-55^\circ C \leq T_{op} \leq +175^\circ C$, $-55^\circ C \leq T_{stg} \leq +175^\circ C$ (ambient temperatures).

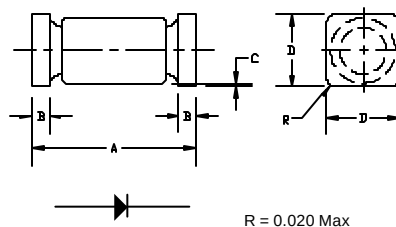
To order surface mount devices (MELFs), add the suffix US to the above listed part numbers.

TVS OUTLINES

AXIAL



MELF



R = 0.020 Max

500 W 1N6102 - 1N6137, 1N6102A - 1N6137A

PACKAGE	DIMENSIONS - INCHES / MILLIMETERS			
STYLE	ØB	ØD	G	L
401	.026/.033 .66/.84	.085/.140 2.16/3.56	.140/.185 3.56/4.70	1.00/1.30 25.4/33.02

500 W 1N6102US - 1N6137US, 1N6102AUS - 1N6137AUS

PACKAGE	DIMENSIONS - INCHES / MILLIMETERS			
STYLE	A	B	C	D
MELF-B	.200/.225 5.08/5.72	.019/.028 0.48/0.71	0.003 Min 0.08 Min	.137/.148 3.48/3.76