

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

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## AXIAL LEAD / MELF, TRANSIENT VOLTAGE SUPPRESSOR DIODES (Continued)

## TRANSIENT VOLTAGE SUPPRESSORS, 1500W 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 $V_{(BR)}$	MAX. REVERSE CURRENT @ $T_A = 150^\circ C$	PACKAGE STYLE
				$\mu A_{dc}$	$\mu A_{dc}$					
1500W	Min. Vdc	mA dc	Vdc	$\mu A_{dc}$	$\mu A_{dc}$	V(pk)	A(pk)	% / °C	$\mu A_{dc}$	
1N6138	6.12	175	5.2	100	500	11.0	136.4	.05	12,000	
1N6139	6.75	175	5.7	50	300	11.8	127.1	.06	3,000	
1N6140	7.38	150	6.2	20	100	12.7	118.1	.06	2,000	
1N6141	8.19	150	6.9	20	100	14.0	107.1	.06	1,200	
1N6142	9.00	125	7.6	20	100	15.2	98.7	.07	800	
1N6143	9.90	125	8.4	20	20	16.3	92.0	.07	800	
1N6144	10.80	100	9.1	20	20	17.7	84.7	.07	600	
1N6145	11.70	100	9.9	20	20	19.0	78.9	.08	600	
1N6146	13.50	75	11.4	20	20	21.9	68.5	.08	400	
1N6147	14.40	75	12.2	20	20	23.4	64.1	.08	400	
1N6148	16.20	65	13.7	1.0	10	26.3	57.0	.085	400	
1N6149	18.00	65	15.2	1.0	5.0	29.0	51.7	.085	400	
1N6150	19.80	50	16.7	1.0	5.0	31.9	47.0	.085	400	
1N6151	21.6	50	18.2	1.0	5.0	34.8	43.1	.09	400	
1N6152	24.3	50	20.6	1.0	5.0	39.2	38.3	.09	400	
1N6153	27.0	40	22.8	1.0	5.0	43.6	34.4	.09	400	
1N6154	29.7	40	25.1	1.0	5.0	47.9	31.3	.095	400	
1N6155	32.4	30	27.4	1.0	5.0	52.3	28.7	.095	400	
1N6156	35.1	30	29.7	1.0	5.0	56.2	26.7	.095	400	
1N6157	38.7	30	32.7	1.0	5.0	62.0	24.2	.095	400	
1N6158	42.3	25	35.8	1.0	5.0	67.7	22.2	.095	400	
1N6159	45.9	25	38.8	1.0	5.0	73.5	20.4	.095	400	
1N6160	50.40	20	42.6	1.0	5.0	80.7	18.6	.095	400	
1N6161	55.8	20	47.1	1.0	5.0	89.3	16.8	.100	400	
1N6162	61.2	20	51.7	1.0	5.0	98.0	15.3	.100	400	
1N6163	67.5	20	56.0	1.0	5.0	108.1	13.9	.100	400	
1N6164	73.8	15	62.2	1.0	5.0	118.2	12.7	.100	400	
1N6165	81.9	15	69.2	1.0	5.0	131.1	11.4	.100	400	
1N6166	90.0	12	76.0	1.0	5.0	144.1	10.4	.100	400	
1N6167	99.0	12	83.6	1.0	5.0	158.5	9.5	.100	400	
1N6168	108.0	10	91.2	1.0	5.0	172.9	8.7	.100	400	
1N6169	117.0	10	98.8	1.0	5.0	187.3	8.0	.105	400	
1N6170	135.0	8.0	114.0	1.0	5.0	216.2	6.9	.105	400	
1N6171	144.0	8.0	121.6	1.0	5.0	228.8	6.6	.105	400	
1N6172	162.0	5.0	136.8	1.0	5.0	257.4	5.8	.110	400	
1N6173	180.0	5.0	152.0	1.0	5.0	286.0	5.2	.110	400	

**Notes:**

$P_R = 2W$  (for 500W peak pulse power devices) and  $3W$  (for 1,500W peak pulse power devices at

$T_A = +25^\circ C$ .

$P_R = 3W$  (for 500W peak pulse power devices) and  $5W$  (for 1,500W peak pulse power devices at

$T_L = +75^\circ C$  for  $L = 0.375$  inch (9.53mm).

$P_{PR} = 500W$  (1N6102 through 1N6137 (including A and US suffix versions) and 1,500W (1N6138 through 1N6173 (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.