

TOSHIBA ZENER DIODE SILICON DIFFUSED TYPE

1AZ6.8~1AZ330

CONSTANT VOLTAGE REGULATION

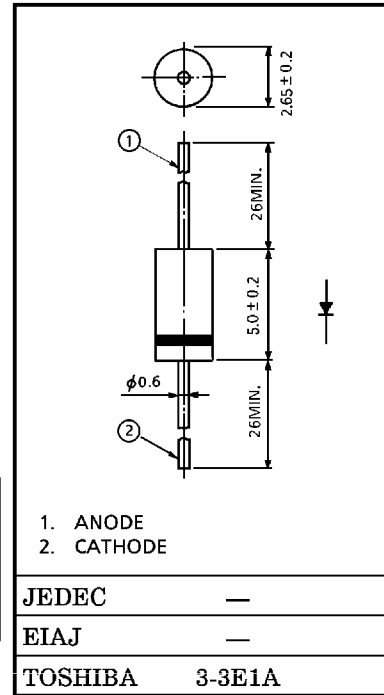
TRANSIENT SUPPRESSORS

- Average Power Dissipation : $P=1.0W$
- Zener Voltage : $V_Z=6.8\sim 330V$
- Withstand Hard Environment
- Plastic Mold Package
- Can be used for an automatic mounting machine

MAXIMUM RATINGS ($T_a = 25^\circ C$)

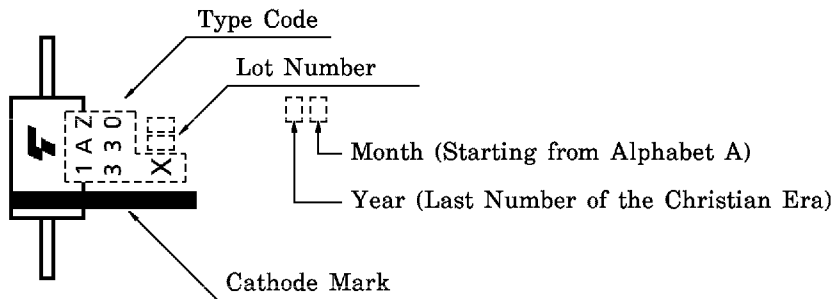
CHARACTERISTIC	SYMBOL	RATING	UNIT
Power Dissipation	P	1.0	W
Junction Temperature	T_j	-40 ~ 150	$^\circ C$
Storage Temperature Range	T_{stg}	-40 ~ 150	$^\circ C$

Unit in mm



Weight : 0.23g

MARKING



Color : Silver

961001EAA1

- TOSHIBA is continually working to improve the quality and the reliability of its products. Nevertheless, semiconductor devices in general can malfunction or fail due to their inherent electrical sensitivity and vulnerability to physical stress. It is the responsibility of the buyer, when utilizing TOSHIBA products, to observe standards of safety, and to avoid situations in which a malfunction or failure of a TOSHIBA product could cause loss of human life, bodily injury or damage to property. In developing your designs, please ensure that TOSHIBA products are used within specified operating ranges as set forth in the most recent products specifications. Also, please keep in mind the precautions and conditions set forth in the TOSHIBA Semiconductor Reliability Handbook.
- The information contained herein is presented only as a guide for the applications of our products. No responsibility is assumed by TOSHIBA CORPORATION for any infringements of intellectual property or other rights of the third parties which may result from its use. No license is granted by implication or otherwise under any intellectual property or other rights of TOSHIBA CORPORATION or others.
- The information contained herein is subject to change without notice.

TYPE *	ZENER CHARACTERISTICS					TEMPERATURE COEFFICIENT OF ZENER VOLTAGE α_T (mV/°C)		FORWARD VOLTAGE		REVERSE CURRENT	
	ZENER VOLTAGE V_Z (V)			ZENER IMPEDANCE r_d (Ω) MAX.	MEASUREMENT CURRENT I_Z (mA)	TYP.	MAX.	V_F (V) MAX.	MEASUREMENT CURRENT I_F (A)	I_R (μ A) MAX.	MEASUREMENT VOLTAGE V_R (V)
	MIN.	TYP.	MAX.								
	MIN.	TYP.	MAX.	MAX.	I_Z (mA)	TYP.	MAX.	MAX.	I_F (A)	MAX.	V_R (V)
1AZ6.8	6.2	6.8	7.4	60	10	3	4	1.2	0.2	10	3.0
1AZ7.5	6.8	7.5	8.3	30	10	4	5	1.2	0.2	10	4.5
1AZ8.2	7.4	8.2	9.1	30	10	4	6	1.2	0.2	10	4.9
1AZ9.1	8.2	9.1	10.1	30	10	5	8	1.2	0.2	10	5.5
1AZ10	9.0	10	11.0	30	10	6	9	1.2	0.2	10	6.0
1AZ11	9.9	11	12.1	30	10	7	11	1.2	0.2	10	7.0
1AZ12	10.8	12	13.2	30	10	8	13	1.2	0.2	10	8.0
1AZ13	11.7	13	14.3	30	10	9	14	1.2	0.2	10	9.0
1AZ15	13.5	15	16.5	30	10	11	17	1.2	0.2	10	10.0
1AZ16	14.4	16	17.6	30	10	12	19	1.2	0.2	10	11.0
1AZ18	16.2	18	19.8	30	10	14	23	1.2	0.2	10	13.0
1AZ20	18.0	20	22.0	30	10	16	26	1.2	0.2	10	14.0
1AZ22	19.8	22	24.2	30	10	18	28	1.2	0.2	10	16.0
1AZ24	21.6	24	26.4	30	10	20	32	1.2	0.2	10	17.0
1AZ27	24.3	27	29.7	30	10	23	36	1.2	0.2	10	19.0
1AZ30	27.0	30	33.0	30	10	25	40	1.2	0.2	10	21.0
1AZ33	29.7	33	36.3	30	10	26	41	1.2	0.2	10	26.4
1AZ36	32.4	36	39.6	30	9	28	45	1.2	0.2	10	28.8
1AZ47	42.3	47	51.7	65	6	38	60	1.2	0.2	10	37.6
1AZ51	45.9	51	56.1	65	6	43	68	1.2	0.2	10	40.8
※ 1AZ200	180	200	220	500	1.5	170	269	1.2	0.2	10	160
※ 1AZ220	198	220	242	5000	0.5	200	309	1.2	0.2	10	176
※ 1AZ220-Y	210	220	230			200	309				176
※ 1AZ220-Z	220	230	240			207	320				184
※ 1AZ240	216	240	264			215	343				192
※ 1AZ240-Y	230	240	250	5000	0.5	215	325	1.2	0.2	10	216
※ 1AZ240-Z	240	250	260			225	338				225
※ 1AZ270	243	270	297			243	385				216
※ 1AZ270-X	250	260	270	5000	0.5	221	350	1.2	0.2	10	234
※ 1AZ270-Y	260	270	280			228	362				243
※ 1AZ270-Z	270	280	290			236	374				252
※ 1AZ300	270	300	330			270	428				240
※ 1AZ300-X	280	290	300	5000	0.5	244	388	1.2	0.2	10	261
※ 1AZ300-Y	290	300	310			253	402				270
※ 1AZ300-Z	300	310	320			261	415				279
※ 1AZ330	297	330	363			296	470				264
※ 1AZ330-X	310	320	330	5000	0.5	270	428	1.2	0.2	10	288
※ 1AZ330-Y	320	330	340			278	441				297
※ 1AZ330-Z	330	340	350			287	455				306

※ Made by order

