

TOSHIBA ZENER DIODE SILICON DIFFUSED TYPE

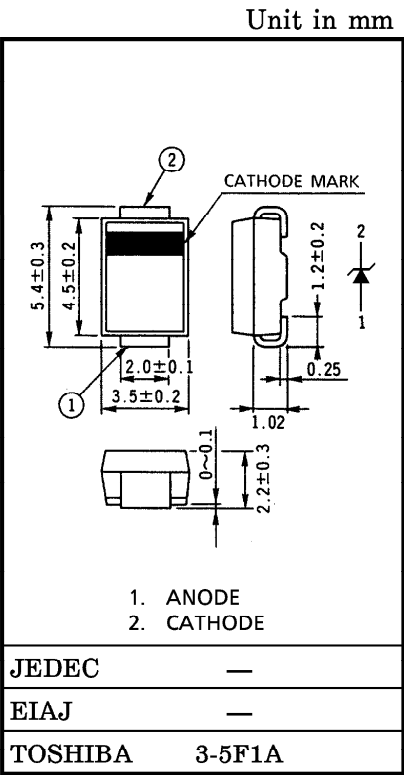
U2Z12~U2Z100

CONSTANT VOLTAGE REGULATION
INDUSTRIAL USE
TRANSIENT SUPPRESSORS
NOISE LIMITTER

- Average Power Dissipation : P=2W
- Zener Voltage : V_Z=12~100V
- Surface Mounting Plastic Mold Package

MAXIMUM RATINGS (Ta = 25°C)

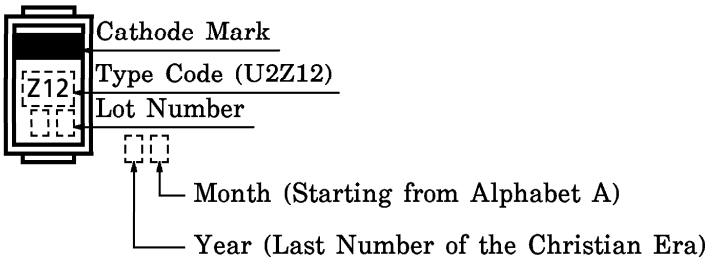
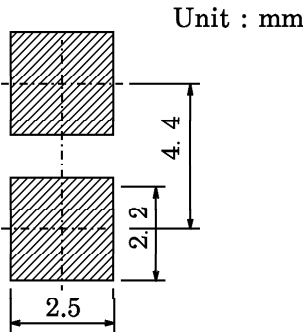
CHARACTERISTIC	SYMBOL	RATING	UNIT
Power Dissipation	P _D	2.0	W
Junction Temperature	T _j	−40 ~ 150	°C
Storage Temperature Range	T _{stg}	−40 ~ 150	°C



Weight : 0.1g

STANDARD SOLDERING PAD

MARK



961001EAA2

● 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.

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

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)	MEASURE- MENT CURRENT I _Z (mA)			V _F (V)	MEASURE- MENT CURRENT I _F (A)	I _R (μA)	MEASURE- MENT VOLTAGE V _R (V)
	MIN.	TYP.	MAX.	MAX.		TYP.	MAX.	MAX.		MAX.	
U2Z12	10.8	12	13.2	30	10	8	13	1.2	0.2	10	8
U2Z13	11.7	13	14.3	30	10	9	14	1.2	0.2	10	9
U2Z15	13.5	15	16.5	30	10	11	17	1.2	0.2	10	10
U2Z16	14.4	16	17.6	30	10	12	19	1.2	0.2	10	11
U2Z18	16.2	18	19.8	30	10	14	23	1.2	0.2	10	13
U2Z20	18.0	20	22.0	30	10	16	26	1.2	0.2	10	14
U2Z22	19.8	22	24.2	30	10	18	28	1.2	0.2	10	16
U2Z24	21.6	24	26.4	30	10	20	32	1.2	0.2	10	17
U2Z27	24.3	27	29.7	30	10	23	36	1.2	0.2	10	19
U2Z30	27.0	30	33.0	30	10	25	40	1.2	0.2	10	21
U2Z33	29.7	33	36.3	30	10	26	41	1.2	0.2	10	26.4
U2Z36	32.4	36	39.6	30	9	28	45	1.2	0.2	10	28.8
U2Z43	38.7	43	47.3	40	7	33	53	1.2	0.2	10	34.4
U2Z47	42.3	47	51.7	65	6	38	60	1.2	0.2	10	37.6
U2Z51	45.9	51	56.1	65	6	43	68	1.2	0.2	10	40.8
U2Z68	61.2	68	74.8	120	4	57	90	1.2	0.2	10	54.4
U2Z75	67.5	75	82.5	150	4	66	104	1.2	0.2	10	60
U2Z82	73.8	82	90.2	170	3	71	113	1.2	0.2	10	65.4
U2Z100	90	100	110	300	3	87	138	1.2	0.2	10	80

961001EAA2'

- 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.