

TOSHIBA ZENER DIODE SILICON DIFFUSED TYPE

**U2Z12~U2Z100**

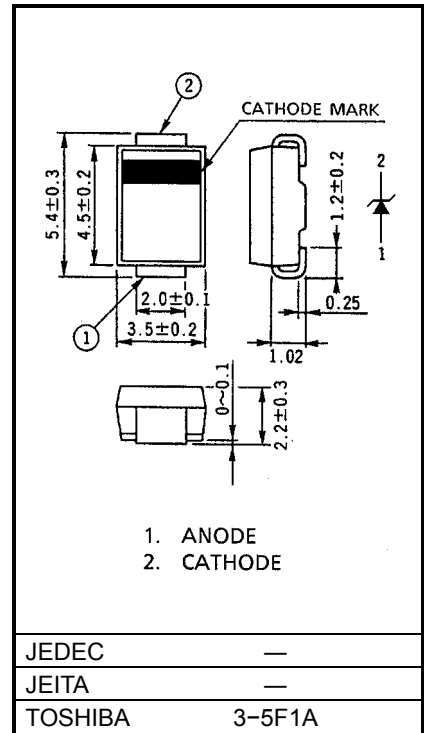
CONSTANT VOLTAGE REGULATION  
INDUSTRIAL USE  
TRANSIENT SUPPRESSORS  
NOISE LIMITTER

- Average Power Dissipation :  $P = 2 \text{ W}$
- Zener Voltage :  $V_Z = 12 \sim 100 \text{ V}$
- Surface Mounting Plastic Mold Package

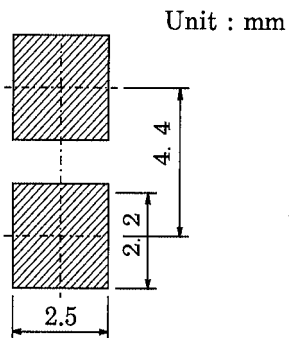
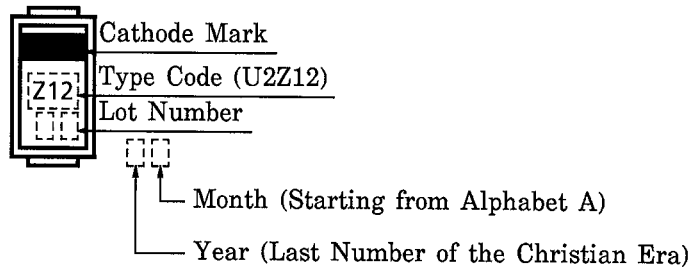
**MAXIMUM RATINGS (Ta = 25°C)**

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

Unit: mm



Weight: 0.1g

**STANDARD SOLDERING PAD****MARKING**

## ELECTRICAL CHARACTERISTICS (Ta = 25°C)

TYPE	ZENER CHARACTERISTICS					TEMPERATURE COEFFICIENT OF ZENER VOLTAGE $\alpha_T$ (mV / °C)		FORWARD VOLTAGE		REVERSE CURRENT	
	ZENER VOLTAGE $V_Z$ (V)			ZENER IMPEDANCE $r_d$ ( $\Omega$ )	MEASUREMENT CURRENT $I_Z$ (mA)	TYP.	MAX	$V_F$ (V)	MEASUREMENT CURRENT $I_F$ (A)	$I_R$ ( $\mu$ A)	MEASUREMENT VOLTAGE $V_R$ (V)
	MIN	TYP.	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

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