

TENTATIVE

TOSHIBA ZENER DIODE SILICON DIFFUSE TYPE

# 1ZC12~1ZC120

CONSTANT VOLTAGE REGULATION

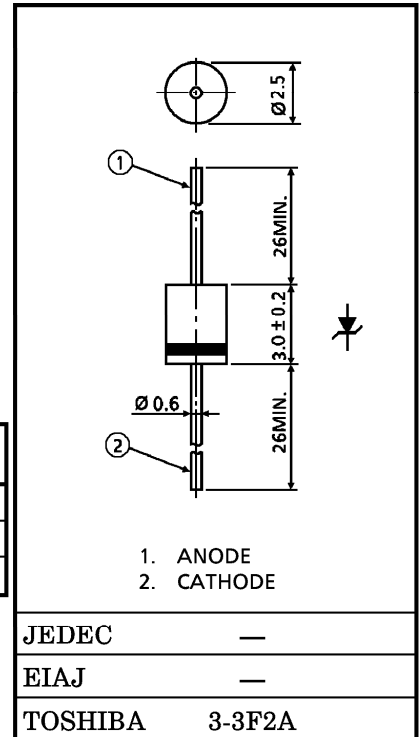
TELEPHONE, PRINTER USES

- Average Power Dissipation :  $P = 1.0 \text{ W}$
- Zener Voltage :  $V_Z = 12 \sim 120 \text{ V}$
- Tolerance of Zener Voltage ( $V_Z$ ) :  $\pm 10\%$
- Plastic Mold Package

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

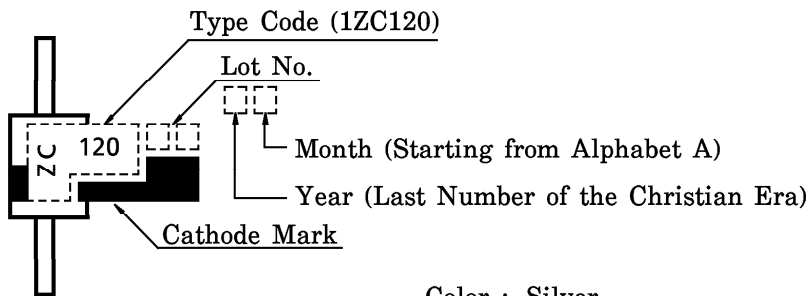
CHARACTERISTIC	SYMBOL	RATING	UNIT
Power Dissipation	P	1.0	W
Junction Temperature	$T_j$	-40~150	°C
Storage Temperature Range	$T_{stg}$	-40~150	°C

Unit in mm



Weight : 0.18 g (Typ.)

MARKING



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## 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.	MAX.						
1ZC12	10.8	12	13.2	30	10	8	13	1.2	0.2	10	8.0
1ZC13	11.7	13	14.3	30	10	9	14	1.2	0.2	10	9.0
1ZC15	13.5	15	16.5	30	10	11	17	1.2	0.2	10	10.0
1ZC16	14.4	16	17.6	30	10	12	19	1.2	0.2	10	11.0
1ZC18	16.2	18	19.8	30	10	14	23	1.2	0.2	10	13.0
1ZC20	18.0	20	22.0	30	10	16	26	1.2	0.2	10	14.0
1ZC22	19.8	22	24.2	30	10	18	28	1.2	0.2	10	16.0
1ZC24	21.6	24	26.4	30	10	20	32	1.2	0.2	10	17.0
1ZC27	24.3	27	29.7	30	10	23	36	1.2	0.2	10	19.0
1ZC30	27.0	30	33.0	30	10	25	40	1.2	0.2	10	21.0
1ZC33	29.7	33	36.3	30	10	26	41	1.2	0.2	10	26.4
1ZC36	32.4	36	39.6	30	9	28	45	1.2	0.2	10	28.8
1ZC39	35.1	39	42.9	35	8	30	48	1.2	0.2	10	31.2
1ZC43	38.7	43	47.3	40	7	33	53	1.2	0.2	10	34.4
1ZC47	42.3	47	51.7	65	6	38	60	1.2	0.2	10	37.6
1ZC51	45.9	51	56.1	65	6	43	68	1.2	0.2	10	40.8
1ZC56	50.4	56	61.6	85	5	48	77	1.2	0.2	10	44.8
1ZC62	55.8	62	68.2	105	5	53	85	1.2	0.2	10	49.6
1ZC68	61.2	68	74.8	120	4	57	90	1.2	0.2	10	54.4
1ZC75	67.5	75	82.5	150	4	66	104	1.2	0.2	10	60.0
1ZC82	73.8	82	90.2	170	3	71	113	1.2	0.2	10	65.4
1ZC91	81.9	91	100.1	240	3	79	127	1.2	0.2	10	72.8
1ZC100	90.0	100	110.0	300	3	87	138	1.2	0.2	10	80.0
1ZC110	99.0	110	121.0	300	3	96	152	1.2	0.2	10	88.0
1ZC120	108.0	120	132.0	350	2.5	106	171	1.2	0.2	10	96.0

