

TOSHIBA ZENER DIODE SILICON EPITAXIAL TYPE

CRY75~CRZ47

USE IN COMMUNICATION, AUTOMATION AND MEASUREMENT EQUIPMENT

CONSTANT VOLTAGE REGULATION

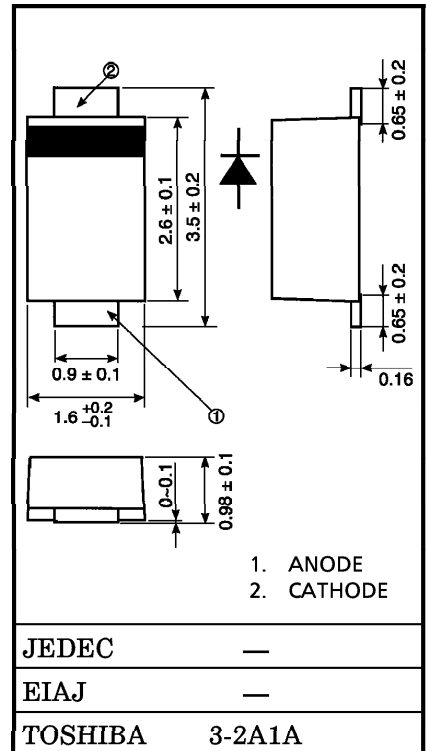
TRANSIENT SUPPRESSORS

- Average Power Dissipation : $P = 0.7 \text{ W}$
- Zener Voltage : $V_Z = 7.5 \sim 47 \text{ V}$
- Suitable for Compact Assembly Because of Small Surface Mount Package
 "S-FLAT™" (Toshiba package name)

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Power Dissipation	P	700	mW
Junction Temperature	T_j	-40~150	°C
Storage Temperature Range	T_{stg}	-40~150	°C

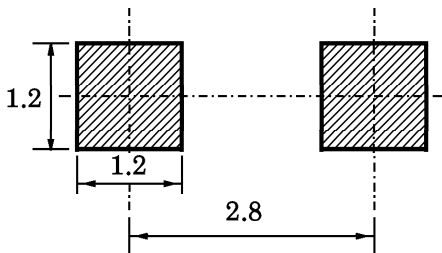
Unit in mm



Weight : 0.013 g

STANDARD SOLDERING PAD

Unit : mm

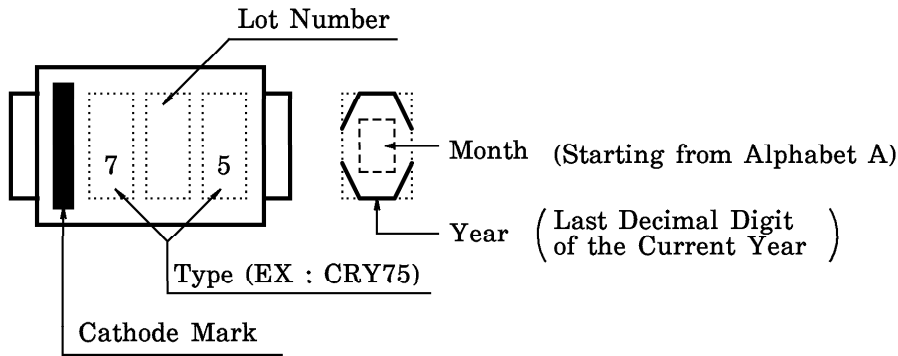


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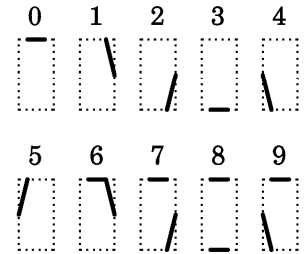
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MARKING

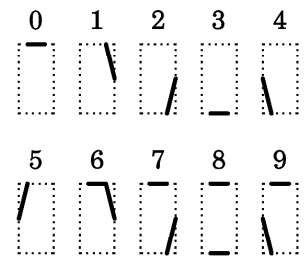
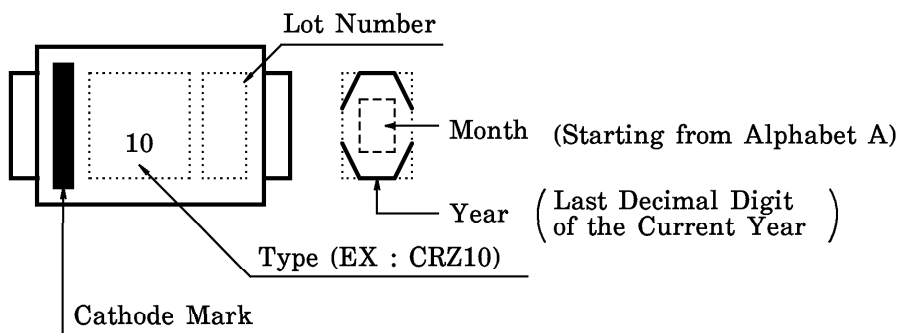
① CRY75~CRY91



FOLLOWING INDICATES THE DATE OF MANUFACTURE



② CRZ10~CRZ47



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

TYPE	ZENER VOLTAGE			MEASURE- MENT CURRENT I _Z (mA)	ZENER IMPEDANCE		TEMPERATURE COEFFICIENT OF ZENER VOLTAGE α_T (mV/°C)		FORWARD VOLTAGE		REVERSE CURRENT	
	V _Z (V)				r _d (Ω)	MEASURE- MENT CURRENT I _Z (mA)	TYP.	MAX.	V _F (V)	MEASURE- MENT CURRENT I _F (A)	I _R (μA)	MEASURE- MENT VOLTAGE V _R (V)
	MIN.	TYP.	MAX.		MAX.							
CRY75	6.8	7.5	8.3	10	30	10	4	5	1.0	0.2	10	4.5
CRY82	7.4	8.2	9.0	10	30	10	4	6	1.0	0.2	10	4.9
CRY91	8.2	9.1	10.0	10	30	10	5	8	1.0	0.2	10	5.5
CRZ10	9.0	10.0	11.0	10	30	10	6	9	1.0	0.2	10	6.0
CRZ11	9.9	11.0	12.1	10	30	10	7	11	1.0	0.2	10	7.0
CRZ12	10.8	12.0	13.2	10	30	10	8	13	1.0	0.2	10	8.0
CRZ13	11.7	13.0	14.3	10	30	10	9	14	1.0	0.2	10	9.0
CRZ15	13.5	15.0	16.5	10	30	10	11	17	1.0	0.2	10	10.0
CRZ16	14.4	16.0	17.6	10	30	10	12	19	1.0	0.2	10	11.0
CRZ18	16.2	18.0	19.8	10	30	10	14	23	1.0	0.2	10	13.0
CRZ20	18.0	20.0	22.0	10	30	10	16	26	1.0	0.2	10	14.0
CRZ22	19.8	22.0	24.2	10	30	10	18	28	1.0	0.2	10	16.0
CRZ24	21.6	24.0	26.4	10	30	10	20	32	1.0	0.2	10	17.0
CRZ27	24.3	27.0	29.7	10	30	10	23	36	1.0	0.2	10	19.0
CRZ30	27.0	30.0	33.0	10	30	10	25	40	1.0	0.2	10	21.0
CRZ33	29.7	33.0	36.3	10	30	10	26	41	1.0	0.2	10	26.4
CRZ36	32.4	36.0	39.6	9	30	9	28	45	1.0	0.2	10	28.8
CRZ39	35.1	39.0	42.9	8	35	8	30	48	1.0	0.2	10	31.2
CRZ43	38.7	43.0	47.3	7	40	7	33	53	1.0	0.2	10	34.4
CRZ47	42.3	47.0	51.7	6	65	6	38	60	1.0	0.2	10	37.6

