

TOSHIBA DIODE SILICON EPITAXIAL PLANAR TYPE

015Z2.0~015Z12

CONSTANT VOLTAGE REGULATION APPLICATIONS

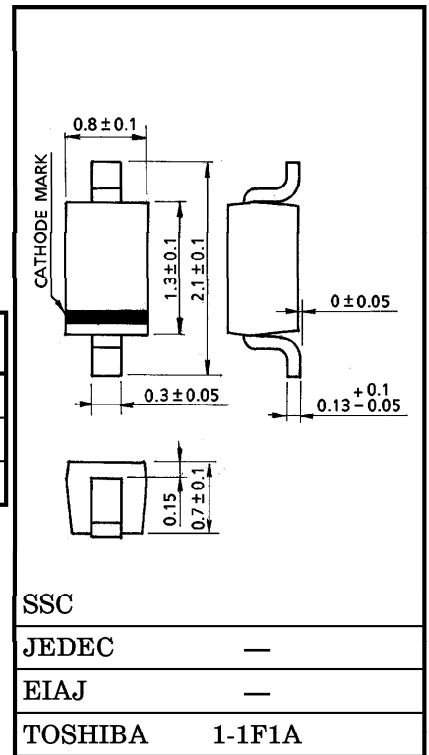
Unit in mm

- Small Package
- Nominal voltage tolerance about $\pm 2.5\%$ (2.0V~12V)

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Power Dissipation	P^*	150	mW
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~125	$^\circ\text{C}$

* Mounted on a glass epoxy circuit board of $20 \times 20\text{mm}$, Pad dimension of $4 \times 4\text{mm}$.



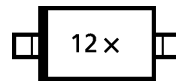
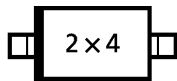
ELECTRICAL CHARACTERISTICS

(See Page 2~3)

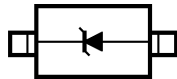
Marking

Example 1 : 015Z2.4-x

Example 2 : 015Z12-x



PIN ASSIGNMENT (TOP VIEW)



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

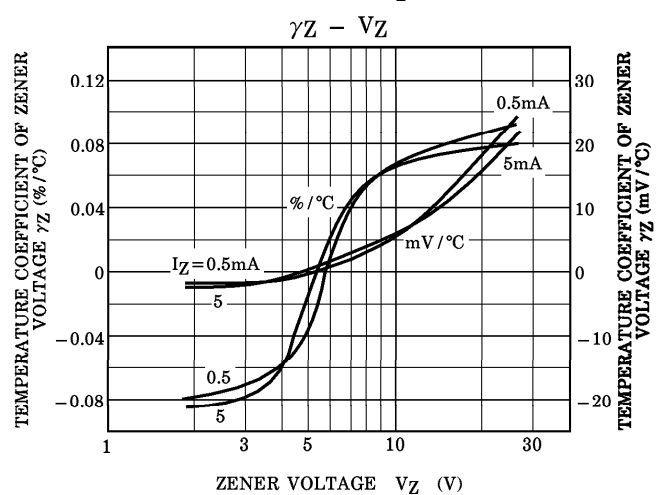
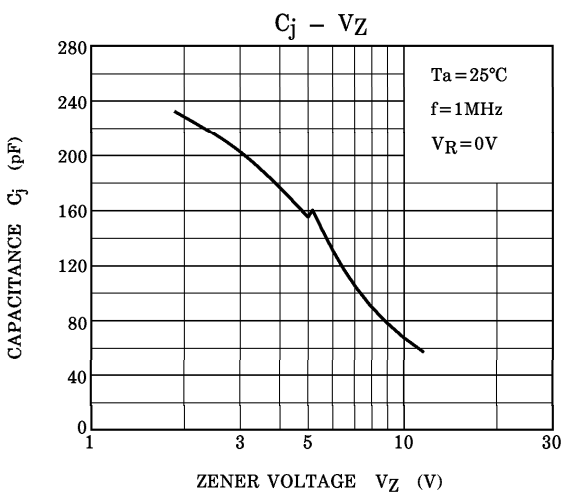
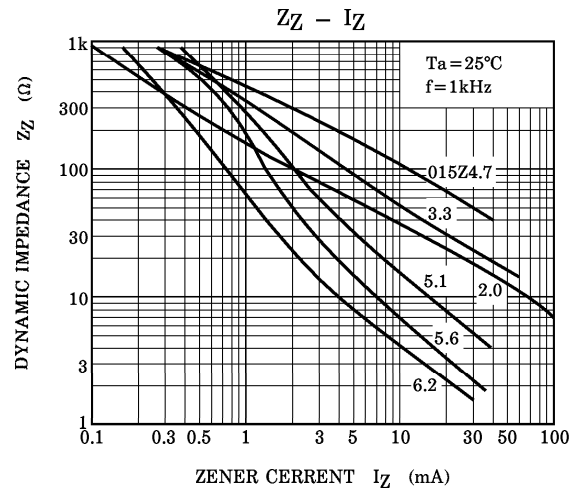
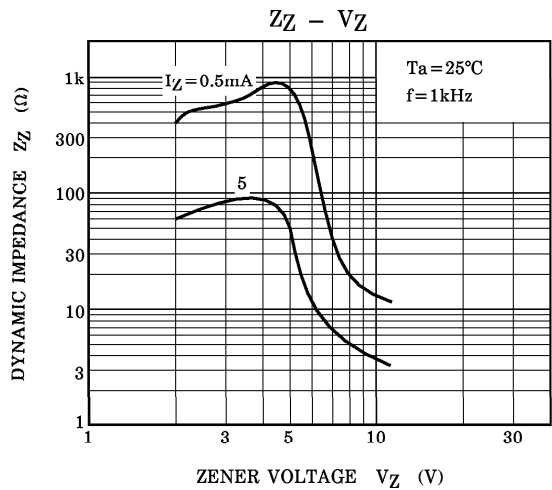
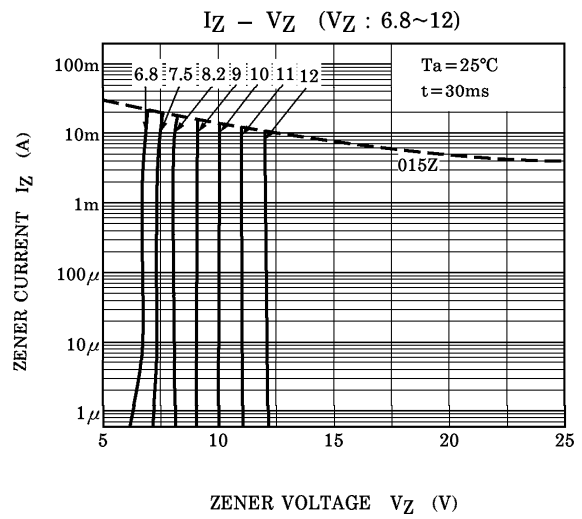
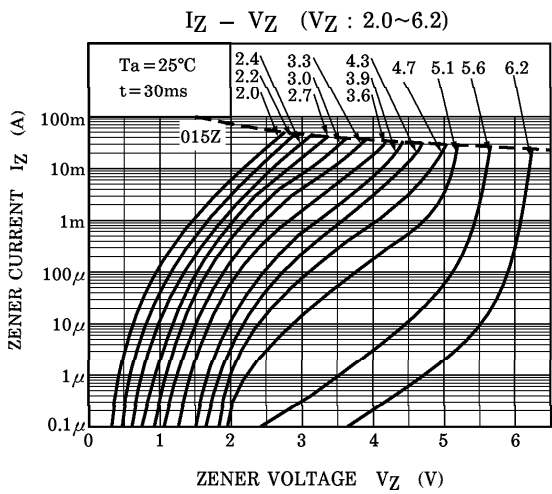
TYPE No.		ZENER VOLTAGE		I _Z (mA)	DYNAMIC IMPEDANCE		KNEE DYNAMIC IMPEDANCE		REVERSE CURRENT	
		※ V _Z (V)			Z _Z (Ω)	I _Z	Z _{ZK} (Ω)	I _Z	I _R (μA)	V _R
		MIN.	MAX.		MAX.	(mA)	MAX.	(mA)	MAX.	(V)
015Z2.0 ※※	X	1.85	2.05	5	100	5	1000	0.5	120	0.5
	Z	1.95	2.15							
015Z2.2 ※※	X	2.05	2.26	5	100	5	1000	0.5	120	1.0
	Z	2.16	2.38							
015Z2.4	X	2.28	2.50	5	100	5	1000	0.5	120	1.0
	Z	2.40	2.60							
015Z2.7	X	2.50	2.75	5	110	5	1000	0.5	120	1.0
	Z	2.65	2.90							
015Z3.0	X	2.80	3.05	5	120	5	1000	0.5	50	1.0
	Z	2.95	3.20							
015Z3.3	X	3.10	3.35	5	130	5	1000	0.5	20	1.0
	Z	3.25	3.50							
015Z3.6	X	3.40	3.65	5	130	5	1000	0.5	10	1.0
	Z	3.55	3.80							
015Z3.9	X	3.70	3.97	5	130	5	1000	0.5	10	1.0
	Z	3.87	4.10							
015Z4.3	X	4.00	4.23	5	130	5	1000	0.5	5	1.0
	Y	4.13	4.35							
	Z	4.25	4.50							
015Z4.7	X	4.40	4.63	5	120	5	1000	0.5	5	1.0
	Y	4.53	4.76							
	Z	4.66	4.90							
015Z5.1	X	4.80	5.07	5	70	5	1000	0.5	1	1.5
	Y	4.97	5.24							
	Z	5.14	5.40							
015Z5.6	X	5.30	5.63	5	40	5	900	0.5	1	2.5
	Y	5.43	5.81							
	Z	5.61	6.00							
015Z6.2	X	5.80	6.20	5	30	5	500	0.5	1	3.0
	Y	6.00	6.39							
	Z	6.19	6.60							
015Z6.8	X	6.40	6.80	5	25	5	150	0.5	0.5	5.0
	Y	6.60	7.02							
	Z	6.82	7.20							

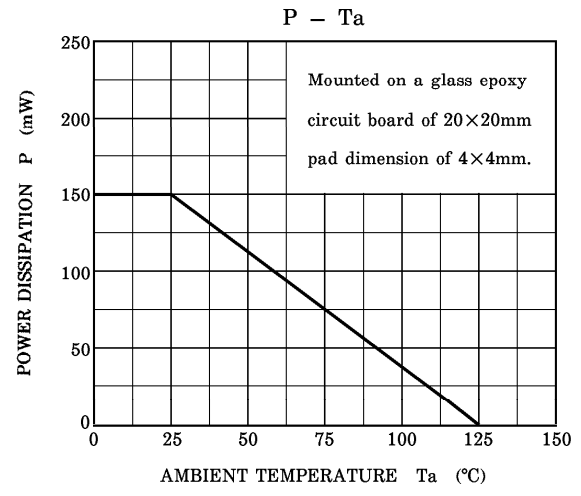
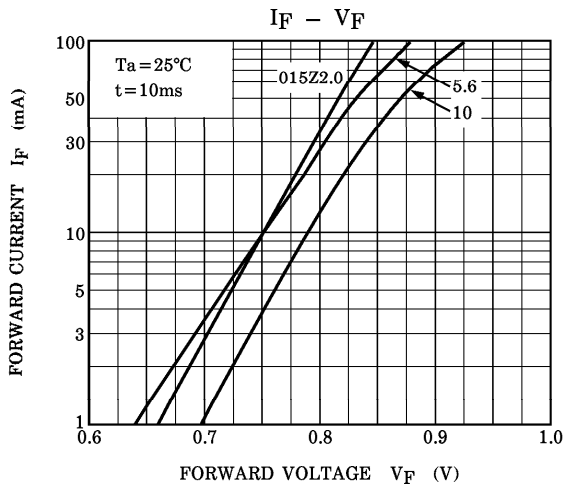
※ : Test time : t=30ms
 ※※ : Product by order.

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

TYPE No.		ZENER VOLTAGE		I _Z (mA)	DYNAMIC IMPEDANCE		KNEE DYNAMIC IMPEDANCE		REVERSE CURRENT	
		※ V _Z (V)			Z _Z (Ω)	I _Z	Z _{ZK} (Ω)	I _Z	I _R (μA)	V _R
		MIN.	MAX.		MAX.	(mA)	MAX.	(mA)	MAX.	(V)
015Z7.5	X	7.00	7.43	5	23	5	120	0.5	0.5	6.0
	Y	7.23	7.66							
	Z	7.46	7.90							
015Z8.2	X	7.70	8.16	5	20	5	120	0.5	0.5	6.5
	Y	7.96	8.43							
	Z	8.23	8.70							
015Z9.1	X	8.50	9.00	5	18	5	120	0.5	0.5	7.0
	Y	8.80	9.30							
	Z	9.10	9.60							
015Z10	X	9.40	9.93	5	15	5	120	0.5	0.5	8.0
	Y	9.73	10.26							
	Z	10.06	10.60							
015Z11	X	10.40	10.98	5	15	5	120	0.5	0.5	8.5
	Y	10.73	11.26							
	Z	11.06	11.60							
015Z12	X	11.40	11.93	5	15	5	110	0.5	0.5	9.0
	Y	11.73	12.26							
	Z	12.06	12.60							

※ : Test time : t=30ms





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