



## ZD1.8 THRU ZD36

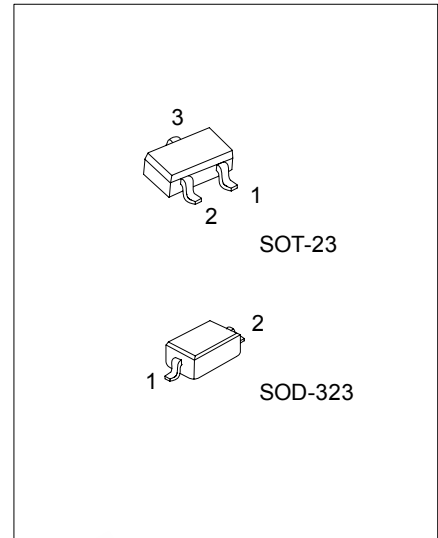
ZENER DIODE

### ZD1.8 THRU ZD36 ZENER DIODES

#### FEATURES

\*Compact, 2-pin(SOD-323) and 3-pin(SOT-23) mini-mold types for high-density mounting.

\*High demand voltage range (1.8V~36V) is manufactured on high-efficient non-wire bonding production line.



\*Pb-free plating product number: ZDxxL

#### ORDERING INFORMATION

Order Number		Package	Pin Assignment			Packing
Normal	Lead Free Plating		1	2	3	
ZDxx-AE3-R	ZDxxL-AE3-R	SOT-23	NC	A	C	Tape Reel
ZDxx-CB2-R	ZDxxL-CB2-R	SOD-323	A	C	-	Tape Reel

Note:1. Pin assignment: A: Anode C: Cathode NC: No Connection  
2. xx: Zener Voltage, refer to Marking Information.

<p>ZDxxL-AE3-R</p> <p>(1)Packing Type (2)Package Type (3)Lead Plating (4)Zener Voltage</p>	<p>(1) R: Tape Reel (2) AE3: SOT-23, CB2: SOD-323 (3) L: Lead Free Plating Blank: Pb/Sn (4) refer to Marking Information</p>
--	--

#### MARKING INFORMATION

PACKAGE	VOLTAGE CODE				MARKING
SOT-23	1.8	5.1	10	20	
	2.4	5.6	11	22	
	2.5	6.0	12	24	
	3.3	6.2	13	25	
	3.9	6.8	15	27	
SOD-323	4.3	7.5	16	30	
	4.7	8.2	18	33	
		9.1	18	36	

# ZD2.4 THRU ZD36

## ZENER DIODE

### ■ ABSOLUTE MAXIMUM RATING (Ta=25°C , unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Total Power Dissipation (Ta=25°C)	P <sub>D</sub>	225	mW
Derating above 25°C		1.8	mW/°C
Thermal Resistance Junction-Ambient	θ <sub>JA</sub>	417	°C/W
Junction Temperature	T <sub>J</sub>	+150	°C
Storage Temperature	T <sub>STG</sub>	-40 ~ +150	°C

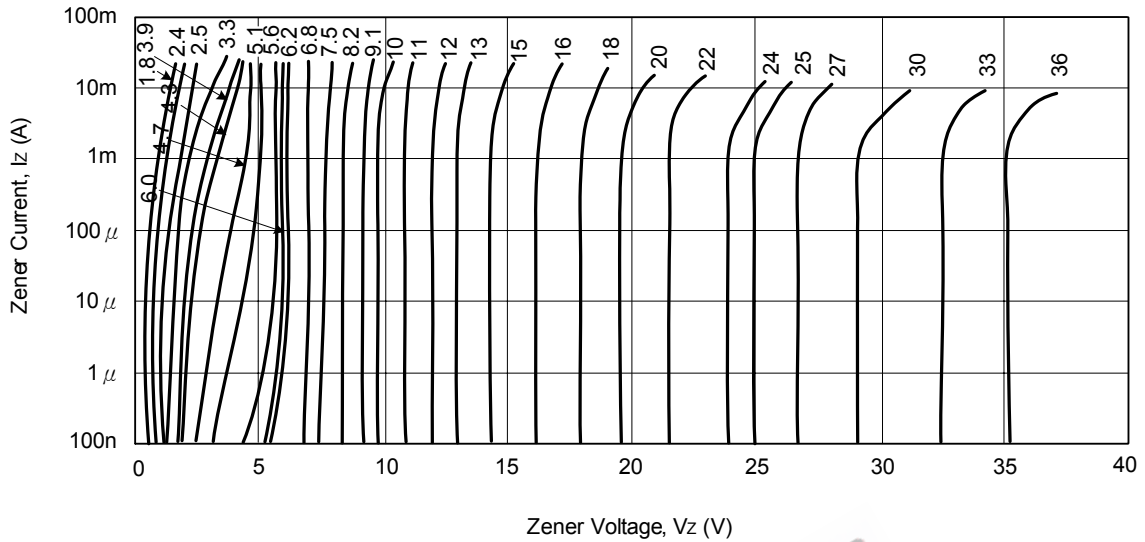
Note Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

### ■ ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified)

(V<sub>F</sub> = 0.9V Max @ I<sub>F</sub> = 10mA for all types.)

Device	Marking Code	Test Current	Zener Voltage	Z <sub>ZK</sub> (Ω)		Z <sub>ZT</sub> (Ω)		I <sub>R</sub> (μA)	
		I <sub>ZT</sub> (mA)	V <sub>Z</sub> (V)	Max	I <sub>Z</sub> (mA)	Max	I <sub>Z</sub> (mA)	Max	@V <sub>R</sub> (V)
ZD1.8	1.8	5	1.8±2.5%	2000	1.0	100	5	20.0	1.0
ZD2.4	2.4	5	2.4±2.5%	2000	1.0	100	5	20.0	1.0
ZD2.5	2.5	5	2.5±2.5%	2000	1.0	100	5	20.0	1.0
ZD3.3	3.3	5	3.3±2.5%	1000	1.0	100	5	10.0	1.0
ZD3.9	3.9	5	3.9±2.5%	1000	1.0	100	5	5.0	1.0
ZD4.3	4.3	5	4.3±2.5%	1000	1.0	100	5	5.0	1.0
ZD4.7	4.7	5	4.7±2.5%	800	0.5	100	5	2.0	1.0
ZD5.1	5.1	5	5.1±2.5%	500	0.5	80	5	2.0	1.5
ZD5.6	5.6	5	5.6±2.5%	200	0.5	60	5	1.0	2.5
ZD6.0	6.0	5	6.0±2.5%	100	0.5	60	5	1.0	2.5
ZD6.2	6.2	5	6.2±2.5%	100	0.5	60	5	1.0	3.0
ZD6.8	6.8	5	6.8±2.5%	60	0.5	40	5	0.5	3.5
ZD7.5	7.5	5	7.5±2.5%	60	0.5	30	5	0.5	4.0
ZD8.2	8.2	5	8.2±2.5%	60	0.5	30	5	0.5	5.0
ZD9.1	9.1	5	9.1±2.5%	60	0.5	30	5	0.5	6.0
ZD10	10	5	10±2.5%	60	0.5	30	5	0.1	7.0
ZD11	11	5	11±2.5%	60	0.5	30	5	0.1	8.0
ZD12	12	5	12±2.5%	80	0.5	30	5	0.1	9.0
ZD13	13	5	13±2.5%	80	0.5	37	5	0.1	10.0
ZD15	15	5	15±2.5%	80	0.5	42	5	0.1	11.0
ZD16	16	5	16±2.5%	80	0.5	50	5	0.1	12.0
ZD18	18	5	18±2.5%	80	0.5	65	5	0.1	13.0
ZD20	20	5	20±2.5%	100	0.5	85	5	0.1	15.0
ZD22	22	5	22±2.5%	100	0.5	100	5	0.1	17.0
ZD24	24	5	24±2.5%	120	0.5	120	5	0.1	19.0
ZD25	25	5	25±2.5%	130	0.5	130	5	0.1	19.0
ZD27	27	5	27±2.5%	150	0.5	150	5	0.1	21.0
ZD30	30	5	30±2.5%	200	0.5	200	5	0.1	23.0
ZD33	33	5	33±2.5%	250	0.5	250	5	0.1	25.0
ZD36	36	5	36±2.5%	300	0.5	300	5	0.1	27.0

## TYPICAL CHARACTERISTIC CURVES



EEPW.com.cn 電子產品世界

UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.