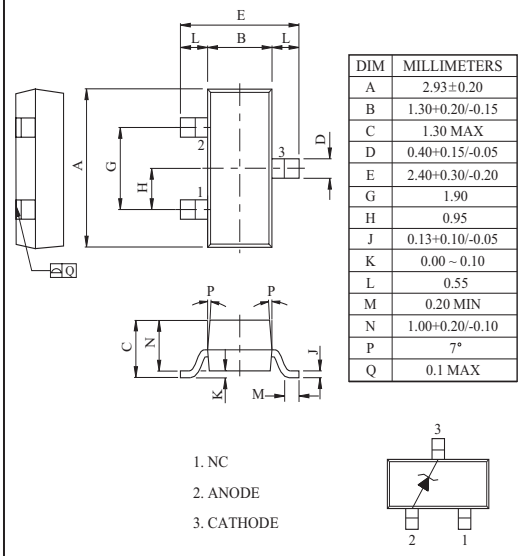
Z02W2.0V~36V

ZENER DIODE
SILICON EPITAXIAL PLANAR DIODE

CONSTANT VOLTAGE REGULATION APPLICATION.
REFERENCE VOLTAGE APPLICATION.



DIM	MILLIMETERS
A	2.93±0.20
B	1.30+0.20/-0.15
C	1.30 MAX
D	0.40+0.15/-0.05
E	2.40+0.30/-0.20
G	1.90
H	0.95
J	0.13+0.10/-0.05
K	0.00 ~ 0.10
L	0.55
M	0.20 MIN
N	1.00+0.20/-0.10
P	7°
Q	0.1 MAX

SOT-23

FEATURES

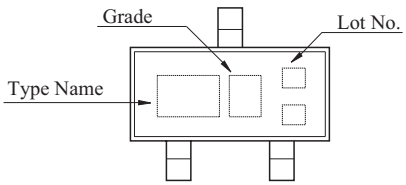
- Small Package : SOT-23.
- Zener Voltage Tolerance.
  - None Grade : About ± 6%
  - X, Z, Y Grade : About ± 2.5%
- Suffix **U** : Qualified to AEC-101.
  ex)Z02W12V-Y-RTK/P**U**

MAXIMUM RATING (Ta=25℃)

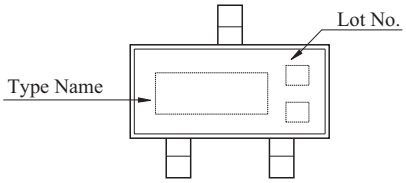
CHARACTERISTIC	SYMBOL	RATING	UNIT
Power Dissipation	P_D	200	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 150	℃

Marking

Example 1) 2.0V ~ 24V



Example 2) 27V ~ 36V



Type No.	Marking	Type No.	Marking	Type No.	Marking	Type No.	Marking
Z02W2.0V	2A	Z02W4.3V	4.3	Z02W9.1V	9.1	Z02W20V	20
Z02W2.2V	2B	Z02W4.7V	4.7	Z02W10V	10	Z02W22V	22
Z02W2.4V	2C	Z02W5.1V	5.1	Z02W11V	11	Z02W24V	24
Z02W2.7V	2D	Z02W5.6V	5.6	Z02W12V	12	Z02W27V	27A
Z02W3.0V	30	Z02W6.2V	6.2	Z02W13V	13	Z02W30V	30A
Z02W3.3V	33	Z02W6.8V	6.8	Z02W15V	15	Z02W33V	33A
Z02W3.6V	36	Z02W7.5V	7.5	Z02W16V	16	Z02W36V	36A
Z02W3.9V	39	Z02W8.2V	8.2	Z02W18V	18	-	-

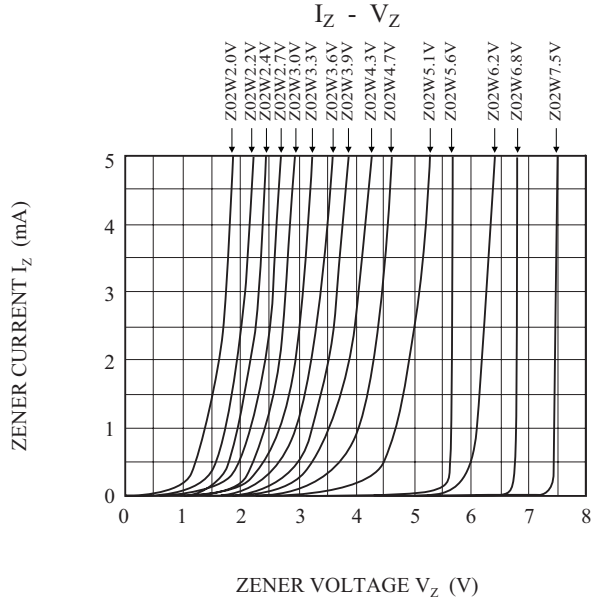
ELECTRICAL CHARACTERISTICS (Ta=25℃)

TYPE No.	Grade	Zener Voltage Vz (V)			Dynamic Impedance Zz (Ω)		KNEE Dynamic Impedance Zzk (Ω)		Reverse Current I_R (μA)	
		Min.	Max.	Iz (mA)	MAX.	Iz (mA)	MAX.	Iz (mA)	MAX.	V_R(V)
Z02W2.0V	-	1.85	2.15	5	10	5	1000	0.5	120	1.0
	X	1.85	2.05							
	Z	1.95	2.15							
Z02W2.2V	-	2.05	2.38	5	100	5	1000	0.5	120	1.0
	X	2.05	2.26							
	Z	2.16	2.38							
Z02W2.4V	-	2.28	2.60	5	100	5	1000	0.5	120	1.0
	X	2.28	2.50							
	Z	2.40	2.60							
Z02W2.7V	-	2.50	2.90	5	110	5	1000	0.5	120	1.0
	X	2.50	2.75							
	Z	2.65	2.90							
Z02W3.0V	-	2.80	3.20	5	120	5	1000	0.5	50	1.0
	X	2.80	3.05							
	Z	2.95	3.20							
Z02W3.3V	-	3.10	3.50	5	130	5	1000	0.5	20	1.0
	X	3.10	3.35							
	Z	3.25	3.50							
Z02W3.6V	-	3.40	3.80	5	130	5	1000	0.5	10	1.0
	X	3.40	3.65							
	Z	3.55	3.80							
Z02W3.9V	-	3.7	4.1	5	130	5	1000	0.5	10	1.0
	X	3.7	3.97							
	Z	3.87	4.1							
Z02W4.3V	-	4.00	4.50	5	130	5	1000	0.5	5	1.0
	Y	4.13	4.35							
Z02W4.7V	-	4.4	4.9	5	120	5	1000	0.5	5	1.0
	Y	4.53	4.76							
Z02W5.1V	-	4.80	5.40	5	70	5	1000	0.5	1	1.5
	Y	4.97	5.24							
Z02W5.6V	-	5.30	6.00	5	40	5	900	0.5	1	2.5
	Y	5.43	5.81							
Z02W6.2V	-	5.80	6.60	5	30	5	500	0.5	1	3.0
	Y	6.00	6.39							
Z02W6.8V	-	6.40	7.20	5	25	5	150	0.5	0.5	5.0
	Y	6.60	7.02							

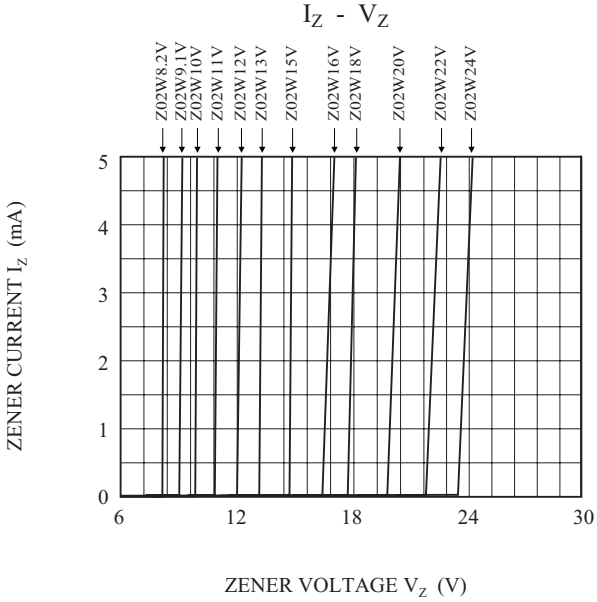
ELECTRICAL CHARACTERISTICS (Ta=25℃)

TYPE No.	Grade	Zener Voltage Vz (V)			Dynamic Impedance Zz (Ω)		KNEE Dynamic Impedance Zzk (Ω)		Reverse Current I_R(μA)	
		Min.	Max.	Iz (mA)	MAX.	Iz (mA)	MAX.	Iz (mA)	MAX.	V_R(V)
Z02W7.5V	-	7.00	7.90	5	23	5	120	0.5	0.5	6.0
	Y	7.23	7.66							
Z02W8.2V	-	7.70	8.70	5	20	5	120	0.5	0.5	6.5
	Y	7.96	8.43							
Z02W9.1V	-	8.50	9.60	5	18	5	120	0.5	0.5	7.0
	Y	8.80	9.30							
Z02W10V	-	9.40	10.60	5	15	5	120	0.5	0.5	8.0
	Y	9.73	10.26							
Z02W11V	-	10.40	11.60	5	15	5	120	0.5	0.5	8.5
	Y	10.73	11.26							
Z02W12V	-	11.40	12.60	5	15	5	110	0.5	0.5	9.0
	Y	11.73	12.26							
Z02W13V	-	12.40	14.10	5	15	5	110	0.5	0.5	10
	Y	12.88	13.57							
Z02W15V	-	13.80	15.60	5	15	5	110	0.5	0.5	11
	Y	14.33	15.11							
Z02W16V	-	15.30	17.10	5	18	5	150	0.5	0.5	12
	Y	15.80	16.60							
Z02W18V	-	16.80	19.10	5	20	5	150	0.5	0.5	14
	Y	17.46	18.43							
Z02W20V	-	18.80	21.20	5	25	5	200	0.5	0.5	15
	Y	19.48	20.46							
Z02W22V	-	20.80	23.30	5	30	5	200	0.5	0.5	17
	Y	21.48	22.56							
Z02W24V	-	22.80	25.60	5	40	5	200	0.5	0.5	19
	Y	23.61	24.92							
Z02W27V	-	26.19	27.53	2	150	2	150	0.5	0.1	21
Z02W30V	-	29.19	30.69		200		200			23
Z02W33V	-	32.15	33.79		250		250			25
Z02W36V	-	35.07	36.87		300		300			27

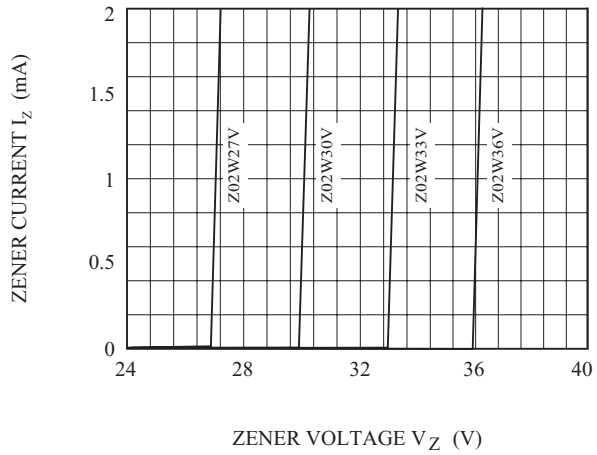
I_Z - V_Z



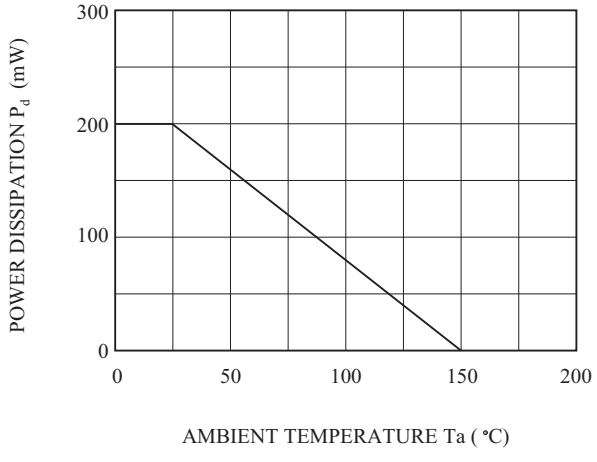
I_Z - V_Z



I_Z - V_Z



P_d - Ta



γ_Z - V_Z