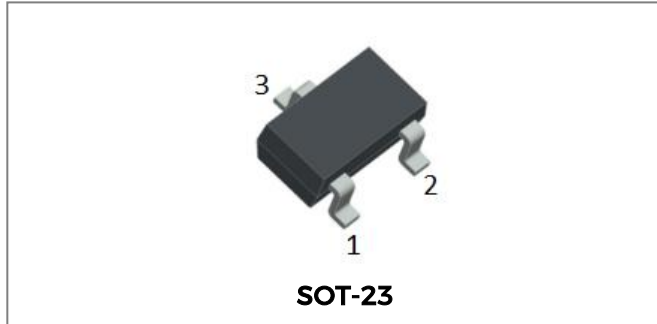


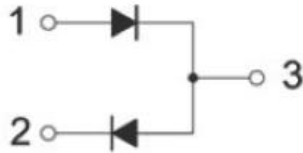
Z02W7.5VS Z02W8.2VS Z02W9.1VS ZENER DIODE



Features

- Constant Voltage control
- SOT23 Thin SMD package
- RoHS compliant / Green EMC
- This is a Halogen Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Schematic & Pin Configuration



Mechanical Characteristics

- Case: SOT-23, Molded Plastic
- Terminals: Plated leads Solderable per MIL-STD-750, Method 2026
- Mounting Position: Any
- Weight: 0.008g
- Matte Tin (Sn) Lead finish

Maximum Ratings @ $T_A=25^\circ\text{C}$ unless otherwise specified

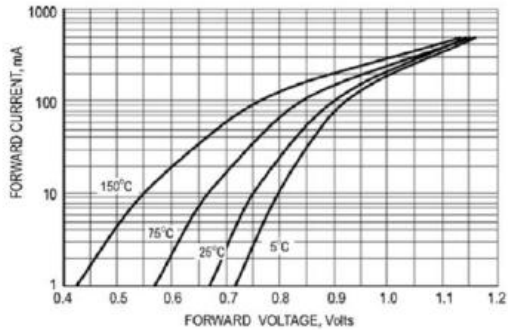
Parameter	Symbol	Value	Units
Power Dissipation	$P_{(AV)}$	200	mW
Maximum Forward Voltage @ $I_F=10\text{mA}$ (Pin1 to Pin3, Pin2 to Pin3)	V_F	0.9	V
Typical Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	357	$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to 150	$^\circ\text{C}$

Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

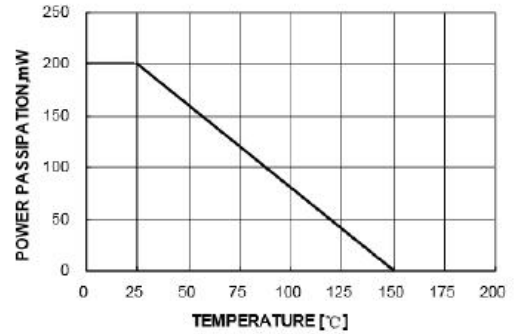
Device	Marking Code	Zener Voltage			Zener Impedance				Leakage Current	
		$V_Z^{*1} @ I_{ZT}$			$Z_{ZT} @ I_{ZT}$	I_{ZT}	$Z_{ZK} @ I_{ZK}$	I_{ZK}	$I_R @ V_R$	V_R
		Nom(V)	Min(V)	Max(V)	Max(Ω)	mA	Max(Ω)	mA	Max(μA)	V
Z02W7.5VS	7.5	7.5	7.23	7.66	23	5	80	1	0.5	6
Z02W8.2VS	8.2	8.2	7.96	8.43	20	5	80	1	0.5	6.5
Z02W9.1VS	9.1	9.1	8.80	9.30	18	5	100	0.3	0.5	7

1. Pulse width =10 ms

Ratings and Characteristics Curves

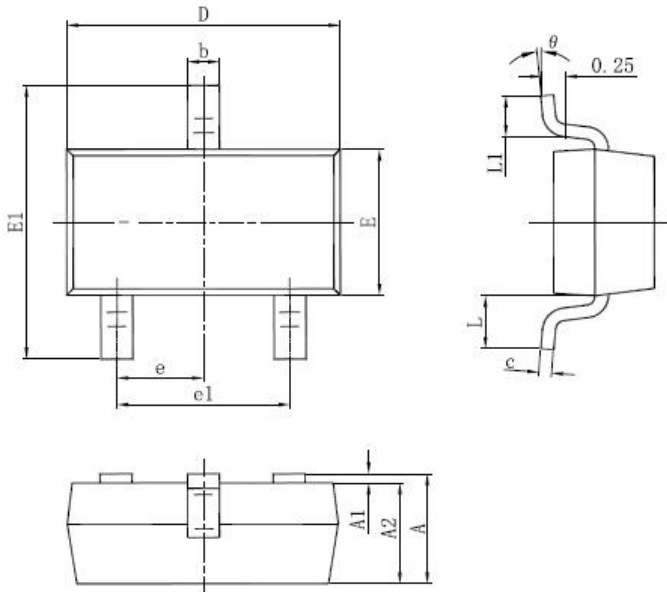


TYPICAL FORWARD VOLTAGE



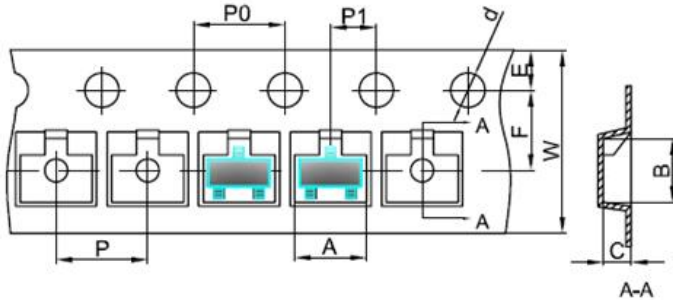
POWER DISSIPATION VS AMBIENT TEMP

Mechanical Dimensions SOT-23



SYMBOL	Millimeters		Inches	
	MIN.	MAX.	MIN.	MAX.
A	0.890	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.076	0.170	0.003	0.007
D	2.650	3.050	0.104	0.120
E	1.190	1.400	0.047	0.055
E1	2.100	2.550	0.083	0.100
e	0.950 TYP.		0.037 TYP.	
e1	1.780	2.050	0.070	0.081
L	0.550 REF.		0.022 REF.	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

Carrier Tape Specification SOT-23



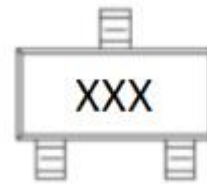
SYMBOL	Millimeters	
	Min.	Max.
A	3.05	3.25
B	2.67	2.87
C	1.12	1.32
d	1.40	1.60
E	1.65	1.85
F	3.40	3.60
P	3.90	4.10
P0	3.90	4.10
P1	1.90	2.10
W	7.90	8.30

Ordering Information

Device	Package	Shipping
Z02W7.5VS Z02W8.2VS Z02W9.1VS	SOT-23	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram



XXX = Marking Code

Technical Data
Data Sheet N2097, Rev. C



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