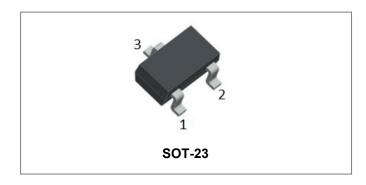


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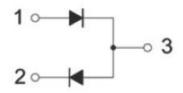
Z02W7.5VS Z02W8.2VS Z02W9.1VS ZENER DIODE



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°C unless otherwise specified

Parameter	Symbol	Value	Units
Power Dissipation	P _(AV)	200	mW
Maximum Forward Voltage @ IF=10mA (Pin1 to Pin3, Pin2 to Pin3)	VF	0.9	V
Typical Thermal Resistance, Junction to Ambient	R _{θJA}	357	°C/W
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-55 to 150	°C

Electrical Characteristics @TA=25°C unless otherwise specified

		Zener Voltage		Zener Impedence			Leakage Current			
Device	Marking Code	,	VZ*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(uA)	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

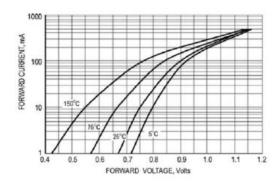
- China Germany Korea Singapore United States
 - http://www.smc-diodes.com sales@ smc-diodes.com •



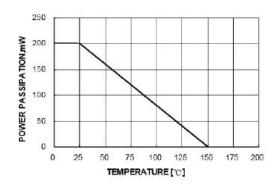
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Ratings and Characteristics Curves



TYPICAL FORWARD VOLTAGE



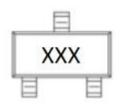
POWER DISSIPATION VS AMBIENT TEMP

Ordering Information

Device	Package	Shipping
Z02W7.5VS Z02W8.2VS	SOT-23	3000pcs / reel
702W9 1VS		'

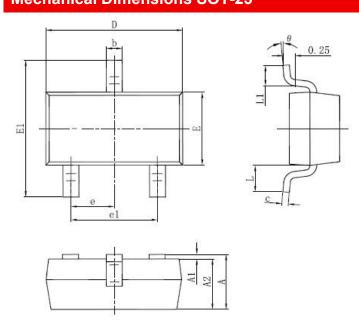
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram



XXX = Marking Code

Mechanical Dimensions SOT-23



OVMDOL	Millim	neters	Inches		
SYMBOL	MIN.	MAX.	MIN.	MAX.	
А	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	
С	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	
е	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°	

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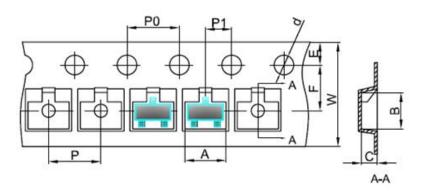


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Carrier Tape Specification SOT-23



SYMBOL	Millimeters			
STWIDOL	Min.	Max.		
Α	3.05	3.25		
В	2.67	2.87		
С	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		

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