

# Zener Diodes SOD-523F

MM5ZS Series

**MERITEK**

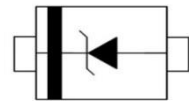
## FEATURE

- Zener Voltage Range: 2.0V to 75V
- Power Dissipation: 200mW
- Ideally Suited for Automated Assembly Processes
- Application: Power Management Systems, Voltage Regulation



## APPLICATION

- Case: SOD-523F, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026



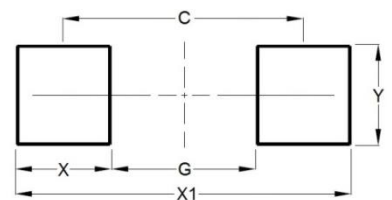
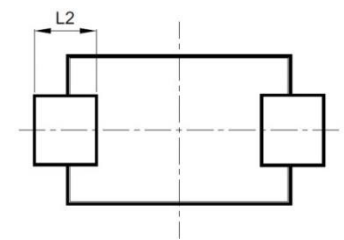
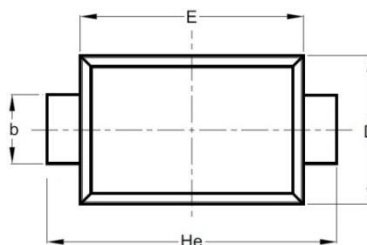
## ABSOLUTE MAXIMUM RATINGS

Parameter	Symbols	Value	Unit
Power Dissipation	$P_D$	200	mW
Forward Voltage at $I_F=10mA$	$V_F$	0.9	V
Junction Temperature Range	$T_J$	150	$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55~+150	$^{\circ}C$

Note:  $T_A=25^{\circ}C$  unless otherwise noted

## DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	0.55	0.65
b	0.25	0.35
c	0.05	0.15
D	0.75	0.85
E	1.15	1.25
He	1.50	1.70
L2	0.20	0.20
C	1.47	1.47
G	0.80	0.80
X	0.53	0.53
X1	2.00	2.00
Y	0.50	0.50



# Zener Diodes SOD-523F

MM5ZS Series

**MERITEK**

## ELECTRICAL CHARACTERISTICS

Part Number	Nominal Zener Voltage				Max Zener Impedance $Z_{ZT}$ at $I_{ZT}$ , $Z_{ZK}$ at $I_{ZK}=1mA$		Max Reverse Leakage Current	
	$V_Z$ at $I_{ZT}$			$I_{ZT}$	$Z_{ZT}$	$Z_{ZK}$	$I_R$ at $V_R$	
	Nom (V)	Min (V)	Max (V)	(mA)	( $\Omega$ )	( $\Omega$ )	( $\mu A$ )	(V)
MM5ZS2V0	2.0	1.80	2.15	5	100	-	120	0.5
MM5ZS2V2	2.2	2.08	2.33	5	100	-	120	0.7
MM5ZS2V4	2.4	2.20	2.60	5	100	1000	120	1.0
MM5ZS2V7	2.7	2.50	2.90	5	100	1000	120	1.0
MM5ZS3V0	3.0	2.80	3.20	5	100	1000	50	1.0
MM5ZS3V3	3.3	3.10	3.50	5	95	1000	20	1.0
MM5ZS3V6	3.6	3.40	3.80	5	90	1000	10	1.0
MM5ZS3V9	3.9	3.70	4.10	5	90	1000	5.0	1.0
MM5ZS4V3	4.3	4.00	4.60	5	90	1000	5.0	1.0
MM5ZS4V7	4.7	4.40	5.00	5	80	800	2.0	1.0
MM5ZS5V1	5.1	4.80	5.40	5	60	500	2.0	1.5
MM5ZS5V6	5.6	5.20	6.00	5	40	200	1.0	2.5
MM5ZS6V2	6.2	5.80	6.60	5	10	100	1.0	3.0
MM5ZS6V8	6.8	6.40	7.20	5	15	160	0.5	3.5
MM5ZS7V5	7.5	7.00	7.90	5	15	160	0.5	4.0
MM5ZS8V2	8.2	7.70	8.70	5	15	160	0.5	5.0
MM5ZS9V1	9.1	8.50	9.60	5	15	160	0.5	6.0
MM5ZS10	10	9.40	10.6	5	20	160	0.1	7.0
MM5ZS11	11	10.4	11.6	5	20	160	0.1	8.0
MM5ZS12	12	11.4	12.7	5	25	80	0.1	9.0
MM5ZS13	13	12.4	14.1	5	30	80	0.1	10
MM5ZS15	15	13.8	15.6	5	30	80	0.1	11
MM5ZS16	16	15.3	17.1	2	40	80	0.1	12
MM5ZS18	18	16.8	19.1	2	45	80	0.1	13
MM5ZS20	20	18.8	21.2	2	55	100	0.1	15
MM5ZS22	22	20.8	23.3	2	55	100	0.1	17
MM5ZS24	24	22.8	25.6	2	70	120	0.1	19
MM5ZS27	27	25.1	28.9	2	80	300	0.1	21
MM5ZS30	30	28.0	32.0	2	80	300	0.1	23
MM5ZS33	33	31.0	35.0	2	80	300	0.1	25
MM5ZS36	36	34.0	38.0	2	90	500	0.1	27
MM5ZS39	39	37.0	41.0	2	130	500	2.0	30
MM5ZS43	43	40.0	46.0	1	150	500	2.0	33
MM5ZS47	47	44.0	50.0	1	170	500	2.0	36

# Zener Diodes SOD-523F

MM5ZS Series

**MERITEK**

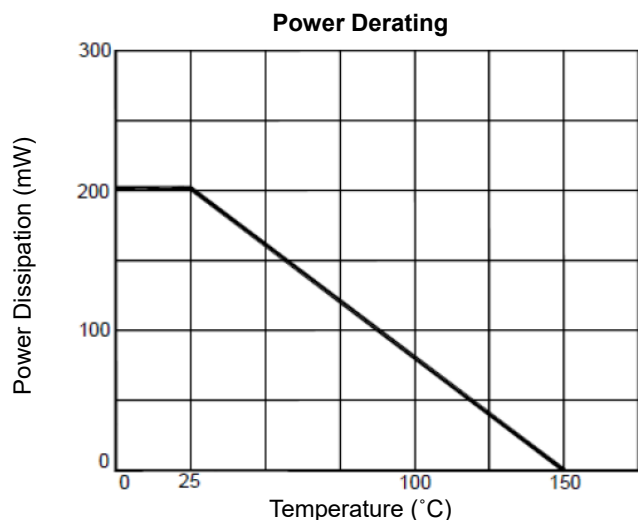
## ELECTRICAL CHARACTERISTICS

Part Number	Nominal Zener Voltage			Max Zener Impedance $Z_{ZT}$ at $I_{ZT}$ , $Z_{ZK}$ at $I_{ZK}=1mA$		Max Reverse Leakage Current	
	$V_Z$ at $I_{ZT}$			$I_{ZT}$	$Z_{ZT}$	$Z_{ZK}$	$I_R$ at $V_R$
	Nom (V)	Min (V)	Max (V)	(mA)	( $\Omega$ )	( $\Omega$ )	( $\mu A$ ) (V)
MM5ZS51	51	48.0	54.0	1	180	500	1.0 39
MM5ZS56	56	52.0	60.0	1	200	500	1.0 43
MM5ZS62	62	58.0	66.0	1	215	500	0.2 47
MM5ZS68	68	64.0	72.0	1	240	500	0.2 52
MM5ZS75	75	70.0	79.0	1	255	500	0.2 57

Note:

1.  $T_A = 25^\circ C$  unless otherwise noted
2. The Zener Voltage ( $V_Z$ ) is tested with pulses (20ms).

## CHARACTERISTIC CURVES



\*Specifications subject to change without notice.