

# Zener Diodes SOD-323F, AEC-Q101

PDZ-B-A Series

**MERITEK**

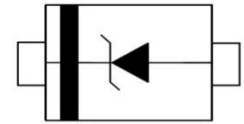
## FEATURE

- Zener Voltage Range: 4.7V to 36V
- Zener Voltage Tolerance:  $\pm 2\%$
- Power Dissipation: 400mW
- Ideally Suited for Automated Assembly Processes
- Application: Power Management Systems, Voltage Regulation
- AEC-Q101 Qualified



## MECHANICAL DATA

- Case: SOD-323F, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Band Marking Denotes Cathode End



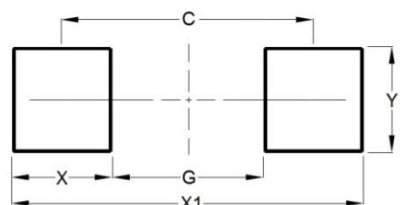
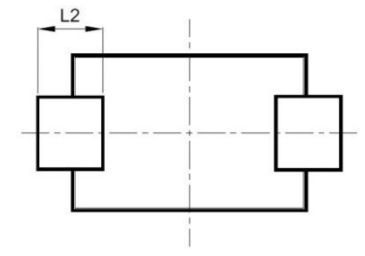
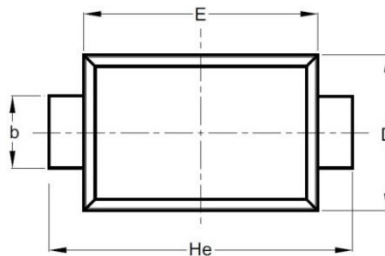
## ABSOLUTE MAXIMUM RATINGS

Parameter	Symbols	Value	Unit
Power Dissipation	$P_D$	400	mW
Resistance Junction to Ambient	$R_{\theta JA}$	650	$^{\circ}C/W$
Junction Temperature	$T_J$	-55~+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	0.70	0.90
b	0.25	0.35
C	0.05	0.15
D	1.15	1.35
E	1.75	1.95
He	2.30	2.70
L2	0.30	-
C	2.17	2.17
G	1.44	1.44
X	0.73	0.73
X1	2.90	2.90
Y	0.50	0.50



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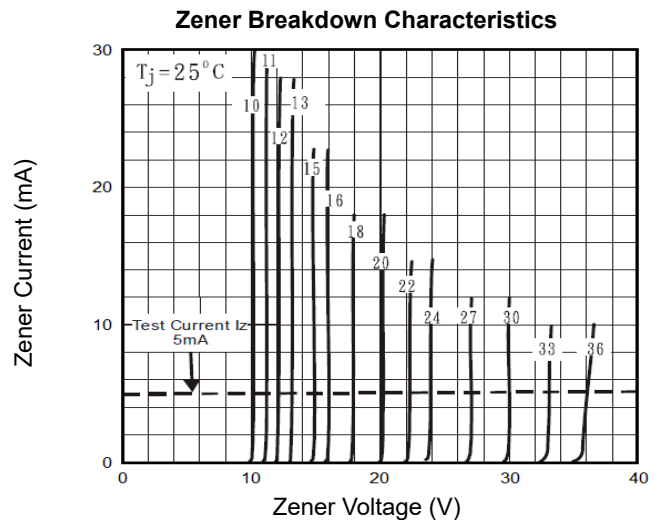
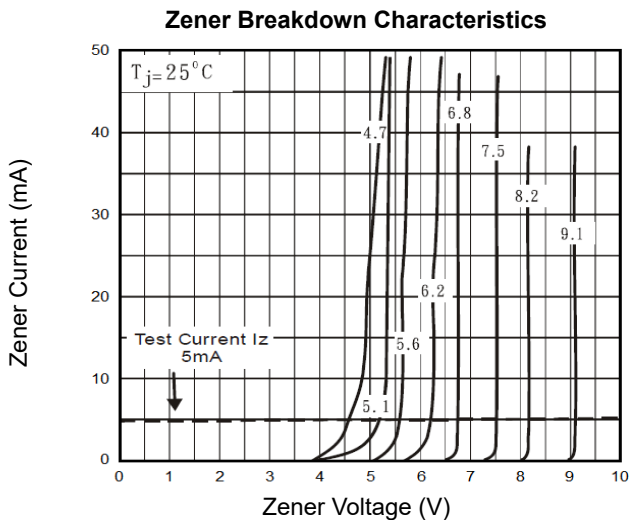
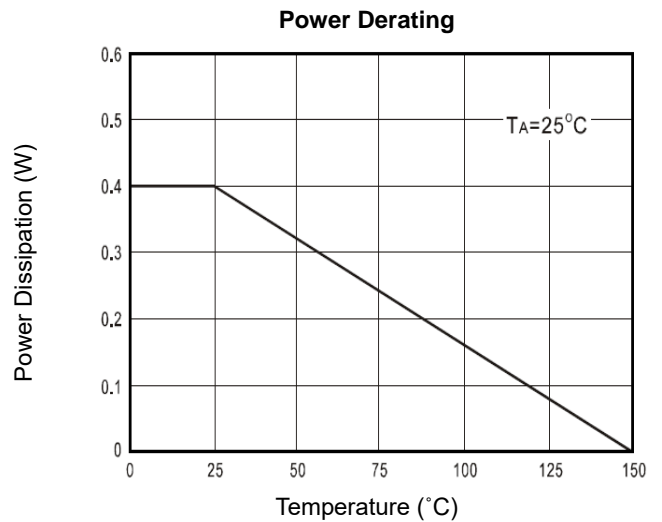
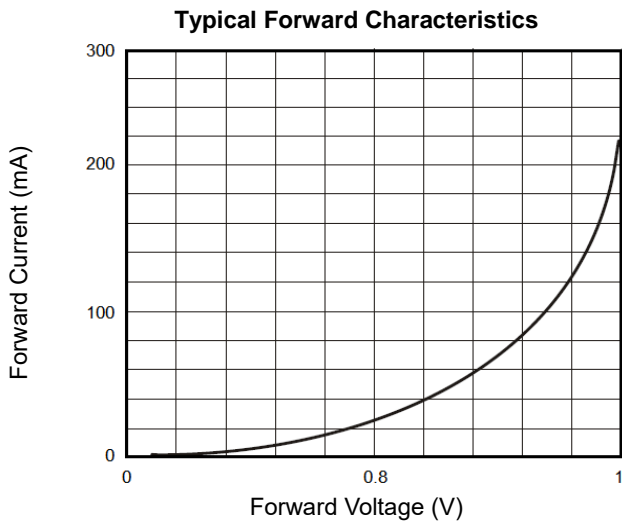
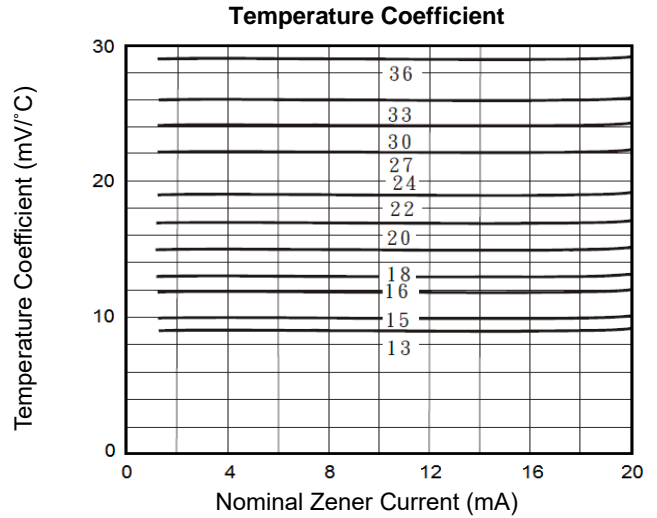
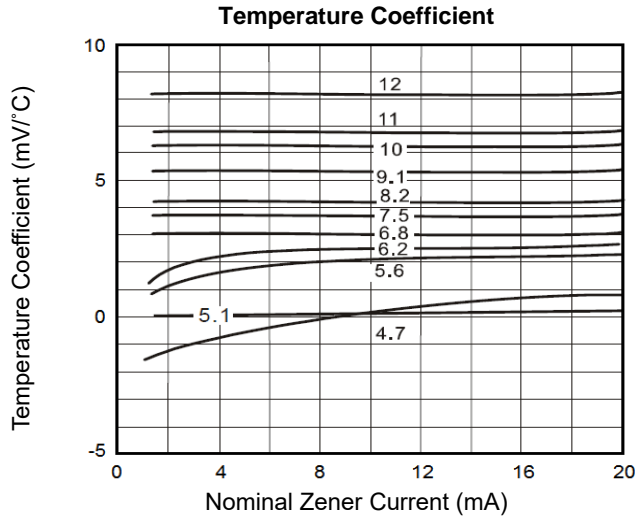
### ELECTRICAL CHARACTERISTICS

Part Number	Nominal Zener Voltage $V_Z$ at $I_{ZT}$		Max Zener Impedance $Z_{ZT}$ at $I_{ZT}=5mA$ , $Z_{ZK}$ at $I_{ZK}$			Reverse Leakage Current $I_R$ at $V_R$	
	Min	Max	$Z_{ZT}$	$Z_{ZK}$	$I_{ZK}$	$I_R$ max	$V_R$
	(V)	(V)	( $\Omega$ )	( $\Omega$ )	(mA)	( $\mu A$ )	(V)
PDZ4.7B-A	4.55	4.75	90	600	1.0	0.75	1.5
PDZ5.1B-A	4.96	5.20	60	800	0.5	0.75	1.5
PDZ5.6B-A	5.48	5.73	50	400	0.5	0.50	3.0
PDZ6.2B-A	6.06	6.33	50	80	0.5	0.50	3.0
PDZ6.8B-A	6.65	6.93	40	60	0.5	0.50	3.5
PDZ7.5B-A	7.28	7.60	10	60	0.5	0.50	4.0
PDZ8.2B-A	8.02	8.36	10	60	0.5	0.50	5.0
PDZ9.1B-A	8.85	9.23	10	60	0.5	0.50	6.0
PDZ10B-A	9.77	10.21	10	60	0.5	0.10	7.0
PDZ11B-A	10.78	11.22	10	60	0.5	0.10	8.0
PDZ12B-A	11.74	12.24	10	80	0.5	0.10	9.0
PDZ13B-A	12.91	13.49	10	80	0.5	0.10	10.0
PDZ15B-A	14.34	14.98	15	80	0.5	0.05	11.0
PDZ16B-A	15.85	16.51	20	80	0.5	0.05	12.0
PDZ18B-A	17.56	18.35	20	80	0.5	0.05	13.0
PDZ20B-A	19.52	20.39	20	100	0.5	0.05	15.0
PDZ22B-A	21.54	22.47	25	100	0.5	0.05	17.0
PDZ24B-A	23.72	24.78	30	120	0.5	0.05	19.0
PDZ27B-A	26.19	27.53	40	150	0.5	0.05	21.0
PDZ30B-A	29.19	30.69	40	200	0.5	0.05	23.0
PDZ33B-A	32.15	33.79	40	250	0.5	0.05	25.0
PDZ36B-A	35.07	36.87	60	300	0.5	0.05	27.0

Note:

1.  $T_A=25^\circ C$  unless otherwise noted
2. Mounted on  $5mm^2$  (0.013mm thick) land areas.
3. Mounted on a FR-4 PCB, single-sided copper, mini pad

## CHARACTERISTIC CURVES



\*Specifications subject to change without notice.