

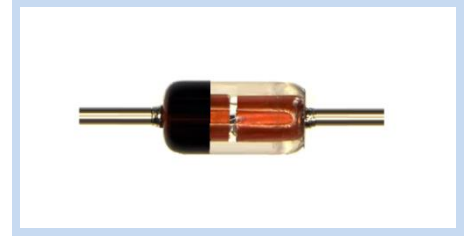
# Zener Diodes DO-41G Axial Leaded

1N47-AG Series

**MERITEK**

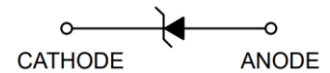
## FEATURE

- Zener Voltage Range: 3.3V to 56V
- Power Dissipation: 1W
- Application: Power Management Systems, Voltage Regulation
- External Surfaces Are Corrosion Resistant And Terminals Are Readily Solderable



## MECHANICAL DATA

- Case: DO-41G, Hermetical Sealed Glass Molded
- Polarity; Cathode Indicated by Band



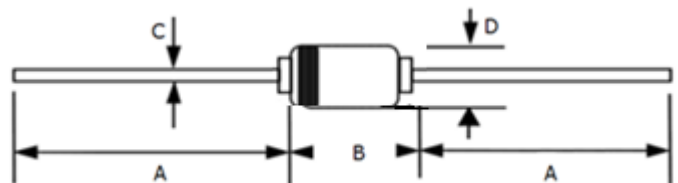
## MAXIMUM RATINGS

Parameter	Symbols	Value	Unit
Power Dissipation	$P_D$	1	W
Forward Voltage at $I_F=200\text{mA}$	$V_F$	1.2	V
Resistance Junction to Ambient	$R_{\theta JA}$	100	$^{\circ}\text{C}/\text{W}$
Junction Temperature	$T_J$	-65~+175	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-65~+175	$^{\circ}\text{C}$

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

## DIMENSIONS

Item	DO-41G	
	Min. (mm)	Max. (mm)
A	25.4	--
B	--	4.25
C	--	0.81
D	--	2.8



# Zener Diodes DO-41G Axial Leaded

1N47-AG Series

**MERITEK**

## ELECTRICAL CHARACTERISTICS

Part Number	Nominal Zener Voltage (Note 1)		Max Zener Impedance (Note 2)			Max Reverse Leakage Current	
	$V_Z$ at $I_{ZT}$	$I_{ZT}$	$Z_{ZT}$ at $I_{ZT}$	$Z_{ZK}$ at $I_{ZK}$	$I_{ZK}$	$I_R$ at $V_R$	
	(V)	(mA)	( $\Omega$ )	( $\Omega$ )	(mA)	( $\mu$ A)	(V)
1N4728AG	3.3	76	10	400	1.00	150	1.0
1N4729AG	3.6	69	10	400	1.00	100	1.0
1N4730AG	3.9	64	9.0	400	1.00	100	1.0
1N4731AG	4.3	58	9.0	400	1.00	50	1.0
1N4732AG	4.7	53	8.0	500	1.00	10	1.0
1N4733AG	5.1	49	7.0	550	1.00	10	1.0
1N4734AG	5.6	45	5.0	600	1.00	10	2.0
1N4735AG	6.2	41	2.0	700	1.00	10	3.0
1N4736AG	6.8	37	3.5	700	1.00	10	4.0
1N4737AG	7.5	34	4.0	700	0.50	10	5.0
1N4738AG	8.2	31	4.5	700	0.50	10	6.0
1N4739AG	9.1	28	5.0	700	0.50	10	7.0
1N4740AG	10	25	7.0	700	0.25	10	7.6
1N4741AG	11	23	8.0	700	0.25	5.0	8.4
1N4742AG	12	21	9.0	700	0.25	5.0	9.1
1N4743AG	13	19	10	700	0.25	5.0	9.9
1N4744AG	15	17	14	700	0.25	5.0	11.4
1N4745AG	16	15.5	16	700	0.25	5.0	12.2
1N4746AG	18	14.0	20	750	0.25	5.0	13.7
1N4747AG	20	12.5	22	750	0.25	5.0	15.2
1N4748AG	22	11.5	23	750	0.25	5.0	16.7
1N4749AG	24	10.5	25	750	0.25	5.0	18.2
1N4750AG	27	9.5	35	750	0.25	5.0	20.6
1N4751AG	30	8.5	40	1000	0.25	5.0	22.8
1N4752AG	33	7.5	45	1000	0.25	5.0	25.1
1N4753AG	36	7.0	50	1000	0.25	5.0	27.4
1N4754AG	39	6.5	60	1000	0.25	5.0	29.7
1N4755AG	43	6.0	70	1500	0.25	5.0	32.7
1N4756AG	47	5.5	80	1500	0.25	5.0	35.8
1N4757AG	51	5.0	95	1500	0.25	5.0	38.8
1N4758AG	56	4.5	110	2000	0.25	5.0	42.6

Note:

1.  $T_A = 25^\circ\text{C}$  unless otherwise noted
2. Tested with pulse  $t_p = 20\text{ms}$
3. The dynamic resistance is derived from the 60Hz AC voltage which results when an AC current having an RMS value equal to 10. % of the Zener Current ( $I_{ZT}$  or  $I_{ZK}$ ) is superimposed on  $I_{ZT}$  or  $I_{ZK}$ . Dynamic resistance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.

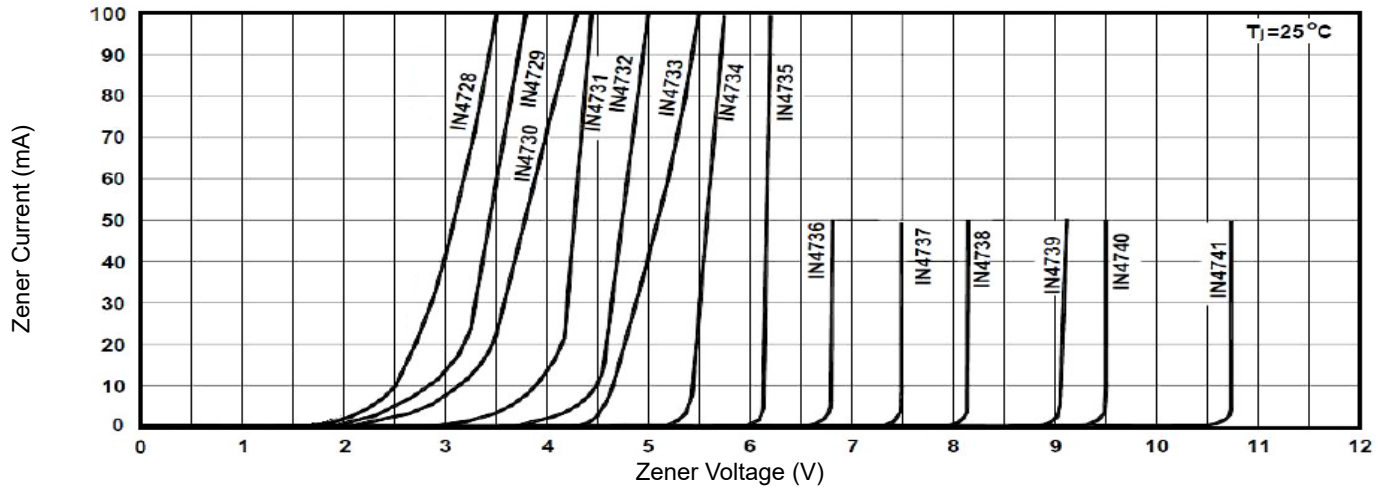
# Zener Diodes DO-41G Axial Leaded

1N47-AG Series

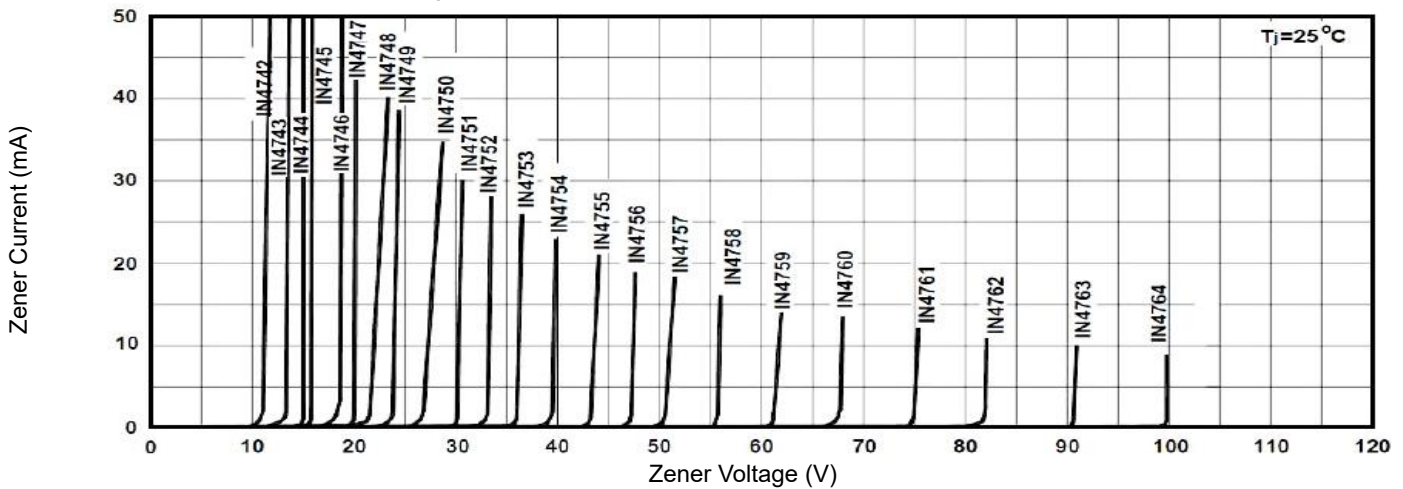
MERITEK

## CHARACTERISTIC CURVES

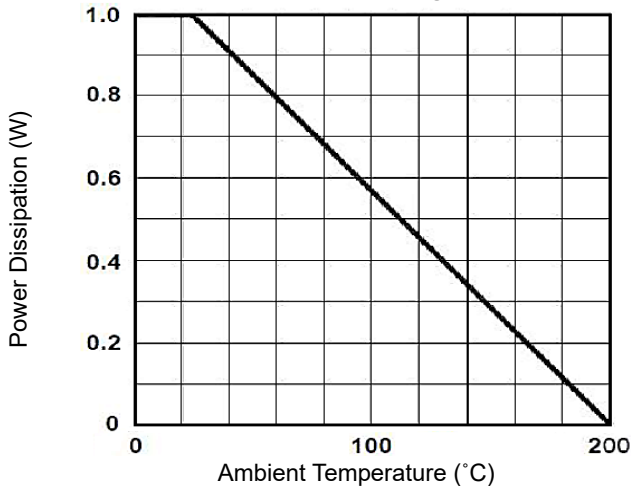
Typical Zener Breakdown Characteristics (with SMG PN)



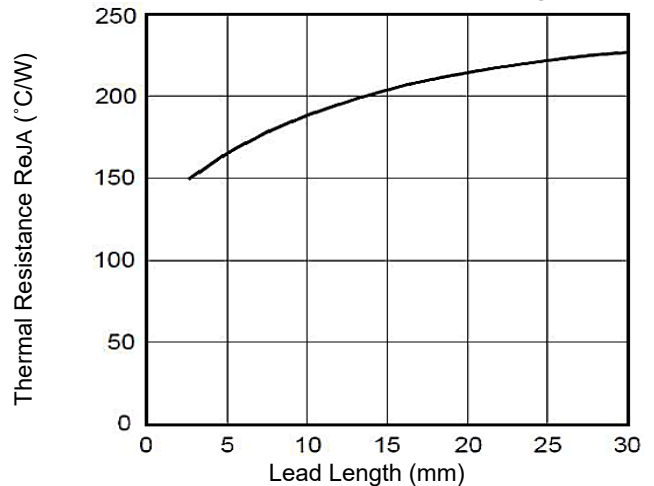
Typical Zener Breakdown Characteristics (with SMG PN)



Power Derating



Thermal Resistance vs Lead Length

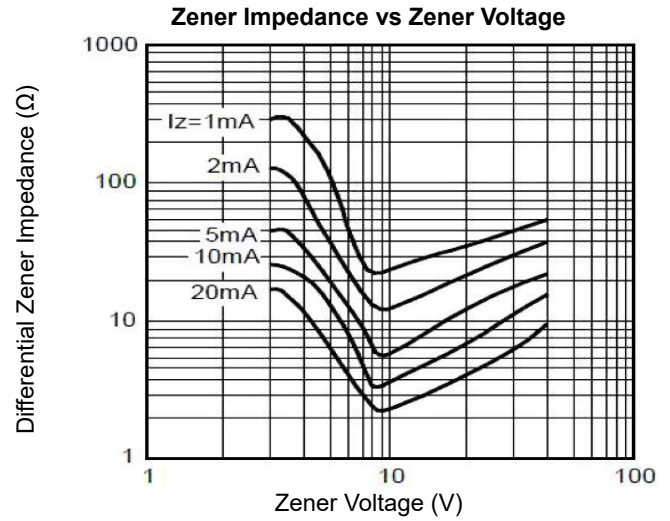
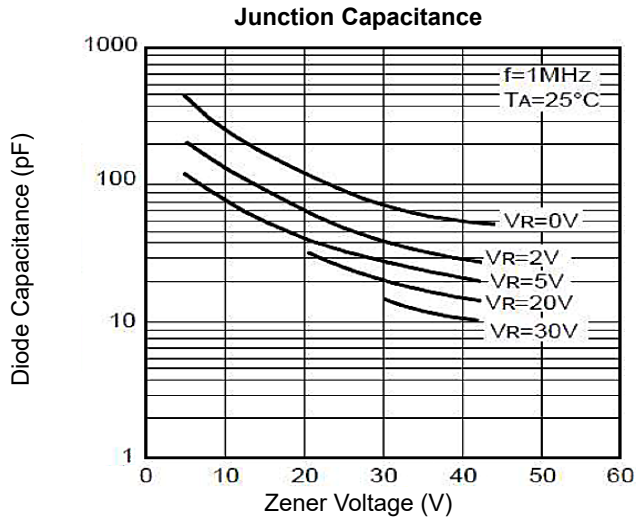


# Zener Diodes DO-41G Axial Leaded

1N47-AG Series

MERITEK

## CHARACTERISTIC CURVES



\*Specifications subject to change without notice.