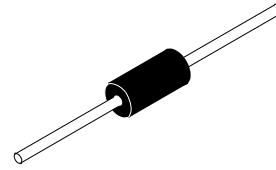


# Zener Diodes

## 1N4728A - 1N4758A



AXIAL LEAD  
CASE 017AH

**ABSOLUTE MAXIMUM RATINGS** (Note 1)

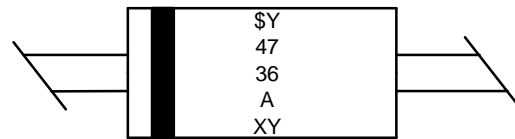
T<sub>a</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value	Unit
P <sub>D</sub>	Power Dissipation @ TL ≤ 50°C, Lead Length = 3/8"	1.0	W
	Derate above 50°C	6.67	mW/°C
T <sub>J</sub> , T <sub>STG</sub>	Operating and Storage Temperature Range	-65 to +200	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

1. These ratings are limiting values above which the serviceability of the diode may be impaired.

**MARKING DIAGRAM**



\$Y = Logo  
4736A = Specific Device Code  
XY = Date Code

**ORDERING INFORMATION**

See detailed ordering and shipping information on page 3 of this data sheet.

# 1N4728A – 1N4758A

**ELECTRICAL CHARACTERISTICS**  $T_a = 25^\circ\text{C}$  unless otherwise noted

Device	$V_Z$ (V) @ $I_Z$ (Note 2)			Test Current $I_Z$ (mA)	Max. Zener Impedance			Leakage Current		Non-Repetitive Peak Reverse Current $I_{ZSM}$ (mA) (Note 3)
	Min.	Typ.	Max.		$Z_Z$ @ $I_Z$ ( $\Omega$ )	$Z_{ZK}$ @ $I_{ZK}$ ( $\Omega$ )	$I_{ZK}$ (mA)	$I_R$ ( $\mu\text{A}$ )	$V_R$ (V)	
1N4728A	3.135	3.3	3.465	76	10	400	1	100	1	1380
1N4732A	4.465	4.7	4.935	53	8	500	1	10	1	970
1N4733A	4.845	5.1	5.355	49	7	550	1	10	1	890
1N4734A	5.32	5.6	5.88	45	5	600	1	10	2	810
1N4735A	5.89	6.2	6.51	41	2	700	1	10	3	730
1N4736A	6.46	6.8	7.14	37	3.5	700	1	10	4	660
1N4737A	7.125	7.5	7.875	34	4	700	0.5	10	5	605
1N4738A	7.79	8.2	8.61	31	4.5	700	0.5	10	6	550
1N4739A	8.645	9.1	9.555	28	5	700	0.5	10	7	500
1N4740A	9.5	10	10.5	25	7	700	0.25	10	7.6	454
1N4741A	10.45	11	11.55	23	8	700	0.25	5	8.4	414
1N4742A	11.4	12	12.6	21	9	700	0.25	5	9.1	380
1N4743A	12.35	13	13.65	19	10	700	0.25	5	9.9	344
1N4744A	14.25	15	15.75	17	14	700	0.25	5	11.4	304
1N4745A	15.2	16	16.8	15.5	16	700	0.25	5	12.2	285
1N4746A	17.1	18	18.9	14	20	750	0.25	5	13.7	250
1N4747A	19	20	21	12.5	22	750	0.25	5	15.2	225
1N4748A	20.9	22	23.1	11.5	23	750	0.25	5	16.7	205
1N4749A	22.8	24	25.2	10.5	25	750	0.25	5	18.2	190
1N4750A	25.65	27	28.35	9.5	35	750	0.25	5	20.6	170
1N4751A	28.5	30	31.5	8.5	40	1000	0.25	5	22.8	150
1N4752A	31.35	33	34.65	7.5	45	1000	0.25	5	25.1	135
1N4753A	34.2	36	37.8	7	50	1000	0.25	5	27.4	125
1N4754A	37.05	39	40.95	6.5	60	1000	0.25	5	29.7	115
1N4755A	40.85	43	45.15	6	70	1500	0.25	5	32.7	110
1N4756A	44.65	47	49.35	5.5	80	1500	0.25	5	35.8	95
1N4757A	48.45	51	53.55	5	95	1500	0.25	5	38.8	90
1N4758A	53.2	56	58.8	4.5	110	2000	0.25	5	42.6	80

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

**NOTES:**

- Zener Voltage ( $V_Z$ ).  
The zener voltage is measured with the device junction in the thermal equilibrium at the lead temperature ( $T_L$ ) at  $30^\circ\text{C} \pm 1^\circ\text{C}$  and 3/8" lead length.
- 2 Square wave Reverse Surge at 8.3 ms soak time.

# 1N4728A – 1N4758A

## TOP MARKING AND ORDERING INFORMATION

Device	Top Marking					Package	Shipping†	
	Line 1	Line 2	Line 3	Line 4	Line 5			
1N4728A	LOGO	47	28	A	XY	Axial Lead (Pb – Free / Halide Free)	3000 / Bulk Bag	
1N4728A–T50A							3000 / Fan–Fold	
1N4728ATR							3000 / Tape and Reel	
1N4732A			32				3000 / Bulk Bag	
1N4732A–T50A							3000 / Fan–Fold	
1N4732ATR							3000 / Tape and Reel	
1N4733A			33				33	3000 / Bulk Bag
1N4733A–T50A								3000 / Fan–Fold
1N4733A–T50R								3000 / Tape and Reel
1N4733ATR								3000 / Tape and Reel
1N4734A			34				34	3000 / Bulk Bag
1N4734A–T50A								3000 / Fan–Fold
1N4734A–T50R								3000 / Tape and Reel
1N4734ATR								3000 / Tape and Reel
1N4735A			35				35	3000 / Bulk Bag
1N4735A–T50A								3000 / Fan–Fold
1N4735A–T50R								3000 / Tape and Reel
1N4735ATR								3000 / Tape and Reel
1N4736A			36				36	3000 / Bulk Bag
1N4736A–T50A								3000 / Fan–Fold
1N4736A–T50R								3000 / Tape and Reel
1N4736ATR								3000 / Tape and Reel
1N4737A			37				37	3000 / Bulk Bag
1N4737A–T50A								3000 / Fan–Fold
1N4737ATR								3000 / Tape and Reel
1N4738A			38				38	3000 / Bulk Bag
1N4738A–T50A								3000 / Fan–Fold
1N4738A–T50R								3000 / Tape and Reel
1N4738ATR								3000 / Tape and Reel
1N4739A			39				39	3000 / Bulk Bag
1N4739A–T50A								3000 / Fan–Fold
1N4739ATR								3000 / Tape and Reel
1N4740A			40				40	3000 / Bulk Bag
1N4740A–T50A								3000 / Fan–Fold
1N4740ATR								3000 / Tape and Reel
1N4741A			41				41	3000 / Bulk Bag
1N4741A–T50A								3000 / Fan–Fold
1N4741ATR								3000 / Tape and Reel
1N4742A			42				42	3000 / Bulk Bag
1N4742A–T50A								3000 / Fan–Fold
1N4742ATR								3000 / Tape and Reel

# 1N4728A – 1N4758A

## TOP MARKING AND ORDERING INFORMATION (continued)

Device	Top Marking					Package	Shipping†						
	Line 1	Line 2	Line 3	Line 4	Line 5								
1N4743A	LOGO	47	43	A	XY	Axial Lead (Pb – Free / Halide Free)	3000 / Bulk Bag						
1N4743A–T50A							3000 / Fan–Fold						
1N4743ATR							3000 / Tape and Reel						
1N4744A			44				45	3000 / Bulk Bag					
1N4744A–T50A								3000 / Fan–Fold					
1N4744A–T50R								3000 / Tape and Reel					
1N4744ATR			45					46	3000 / Tape and Reel				
1N4745A									3000 / Bulk Bag				
1N4745A–T50A									3000 / Fan–Fold				
1N4745ATR			46						47	3000 / Tape and Reel			
1N4746A										3000 / Bulk Bag			
1N4746A–T50A										3000 / Fan–Fold			
1N4746ATR			47							48	3000 / Tape and Reel		
1N4747A											3000 / Bulk Bag		
1N4747A–T50A											3000 / Fan–Fold		
1N4747ATR			48								49	3000 / Tape and Reel	
1N4748A												3000 / Bulk Bag	
1N4748A–T50A												3000 / Fan–Fold	
1N4748ATR			49									50	3000 / Tape and Reel
1N4749A													3000 / Bulk Bag
1N4749A–T50A	3000 / Fan–Fold												
1N4749A–T50R	50	51	3000 / Tape and Reel										
1N4749ATR			3000 / Tape and Reel										
1N4750A			3000 / Bulk Bag										
1N4750A–T50A	51		52	3000 / Fan–Fold									
1N4750ATR				3000 / Tape and Reel									
1N4751A				3000 / Bulk Bag									
1N4751A–T50A	52			53	3000 / Fan–Fold								
1N4751ATR					3000 / Tape and Reel								
1N4752A					3000 / Bulk Bag								
1N4752A–T50A	53				54	3000 / Fan–Fold							
1N4752ATR						3000 / Tape and Reel							
1N4753A						3000 / Bulk Bag							
1N4753A–T50A	54					55	3000 / Fan–Fold						
1N4754A							3000 / Bulk Bag						
1N4754A–T50A							3000 / Fan–Fold						
1N4755A	55						56	3000 / Bulk Bag					
1N4755A–T50A								3000 / Fan–Fold					
1N4756A								3000 / Bulk Bag					
1N4757A	56							57	3000 / Bulk Bag				

# 1N4728A – 1N4758A

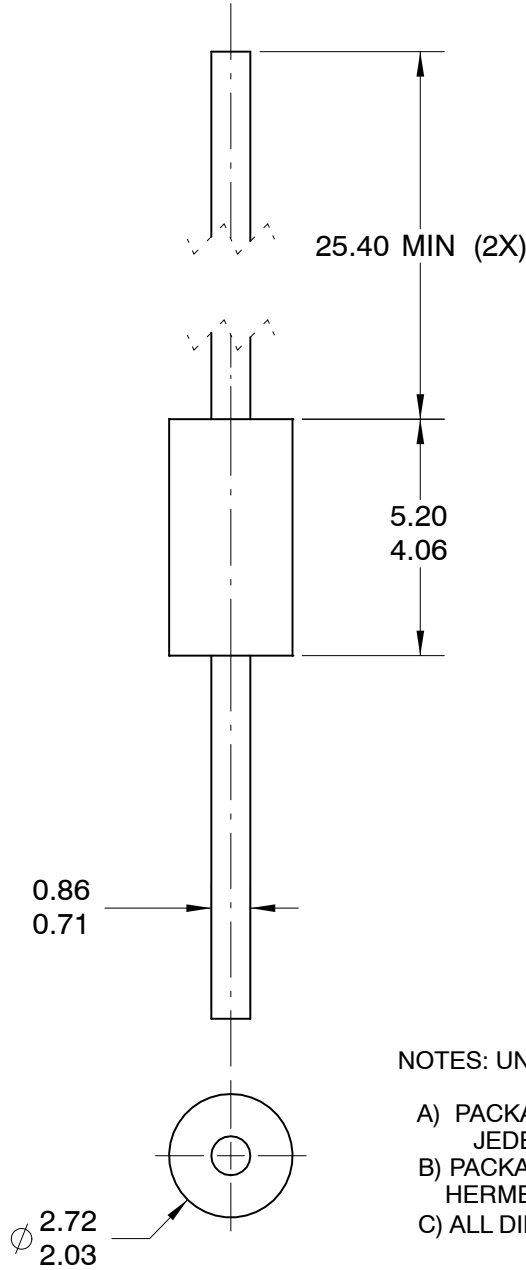
## TOP MARKING AND ORDERING INFORMATION (continued)

Device	Top Marking					Package	Shipping†
	Line 1	Line 2	Line 3	Line 4	Line 5		
1N4758A	LOGO	47	58	A	XY	Axial Lead (Pb – Free / Halide Free)	3000 / Bulk Bag
1N4758A–T50A							3000 / Fan–Fold

†For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D.

**AXIAL LEAD / DO-41**  
CASE 017AH  
ISSUE O

DATE 31 AUG 2016



NOTES: UNLESS OTHERWISE SPECIFIED

- A) PACKAGE STANDARD REFERENCE:  
JEDEC DO-204 VARIATION AL.
- B) PACKAGE BODY CAN BE PLASTIC OR  
HERMETICALLY SEALED GLASS.
- C) ALL DIMENSIONS ARE IN MILLIMETERS.

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