

Distributed by:



www.Jameco.com ♦ 1-800-831-4242

The content and copyrights of the attached
material are the property of its owner.

Jameco Part Number 743744

MCC

Micro Commercial Components

Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

1N746
THRU
1N759

Features

- Zener Voltage 3.3V to 12V
- Silicon Planar Power Zener Diodes
- Standard zener voltage tolerance is $\pm 10\%$, Add suffix "A" for $\pm 5\%$ tolerance, "C" for $\pm 2\%$ tolerance, "D" for $\pm 1\%$ tolerance,

Mechanical Data

- Case: DO-35 glass case
- Marking : Cathode band and type number
- Weight: Approx. 0.13 gram

Maximum Ratings

	Symbol	Value	Units
Zener Current		See Table 1	
Power Dissipation @ $T_A=50^\circ\text{C}$	P_{tot}	500	mW
Junction Temperature	T_J	200	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to 200	$^\circ\text{C}$

Electrical Characteristics @ 25°C Unless Otherwise Specified

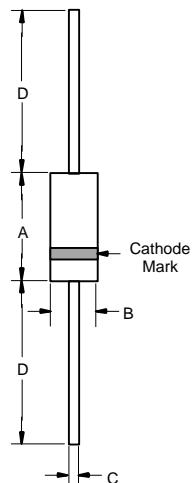
	Symbol	Maximum	Unit
Thermal resistance	R_{JA}	300	$^\circ\text{C}/\text{W}$
Forward Voltage @ $I_F=200\text{mA}$	V_F	1.5	V

NOTE:

- 1) Valid provided that a distance of 8mm from case are kept at ambient temperature
- 2) Power derating: $4.0\text{mW}/^\circ\text{C}$ above 50°C

0.5W Silicon Planar Zener Diodes

DO-35



DIM	DIMENSIONS			
	INCHES		MM	
	MIN	MAX	MIN	MAX
A	---	.166	---	4.2
B	---	.079	---	2.00
C	---	.020	---	.52
D	1.000	---	25.40	---

MCC PART NUMBER	NORMAL ZENER VOLTAGE Vz@ Izt	TEST CURRENT Izt	MAXIMUM ZENER IMPEDANCE Zzt @ Izt	MAXIMUM REVERSE LEAKAGE CURRENT Ir @ Vf=1V		MAXIMUM ZENER CURRENT Iz	TYPICAL TEMP. COEFFICIENT %/°C
	VOLTS	mA	OHMS	uA @25°C	uA @125°C	mA	
1N746	3.3	20	28	10	30	110	-.066
1N747	3.6	20	24	10	30	100	-.058
1N748	3.9	20	23	10	30	95	-.046
1N749	4.3	20	22	2	30	85	-.033
1N750	4.7	20	19	2	30	75	-.015
1N751	5.1	20	17	1	20	70	±.010
1N752	5.6	20	11	1	20	65	+.030
1N753	6.2	20	7.0	0.1	20	60	+.049
1N754	6.8	20	5.0	0.1	20	55	+.053
1N755	7.5	20	6.0	0.1	20	50	+.057
1N756	8.2	20	8.0	0.1	20	45	+.060
1N757	9.1	20	10	0.1	20	40	+.061
1N758	10	20	17	0.1	20	35	+.062
1N759	12	20	30	0.1	20	30	+.062

Note:

- 1) Tested with pulses $t_p=20\text{ms}$
- 2) Valid provided that leads are kept at ambient temperature at a distance of 8mm from case.
- 3) Zener impedance derived by superimposing on I_{ZT} , a 60 Hz, rms ac current equal to 10% I_{ZT} (2 mA ac)
- 4) Allowance has been made for the increase in V_z due to Z_z and for the increase in junction temperature as the unit approaches thermal equilibrium at the power dissipation of 400mW.



Micro Commercial Components

*****IMPORTANT NOTICE*****

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes.

Micro Commercial Components Corp. does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold ***Micro Commercial Components Corp.*** and all the companies whose products are represented on our website, harmless against all damages.

APPLICATIONS DISCLAIMER

Products offered by ***Micro Commercial Components Corp.*** are not intended for use in Medical, Aerospace or Military Applications.