



Micro Commercial Components



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

1N746  
THRU  
1N759

### Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Zener Voltage 3.3V to 12V
- Silicon Planar Power Zener Diodes

0.5W Silicon Planar  
Zener Diodes

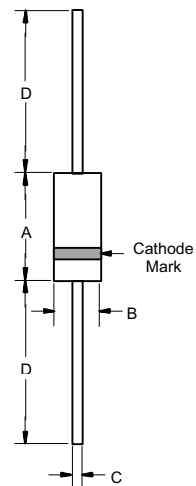
### Mechanical Data

- Moisture Sensitivity: Level 1
- 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 <sub>A</sub> =50°C (Note2,3)	P <sub>tot</sub>	500	mW
Junction Temperature	T <sub>J</sub>	200	°C
Storage Temperature Range	T <sub>STG</sub>	-65 to 200	°C

DO-35



### Electrical Characteristics @ 25°C Unless Otherwise Specified

	Symbol	Maximum	Unit
Thermal resistance	R <sub>θJA</sub>	300	°C/W
Forward Voltage @ I <sub>F</sub> =200mA	V <sub>F</sub>	1.5	V

- NOTE:**
- 1) Lead in Glass Exemption Applied, see EU Directive Annex 5.
  - 2) Valid provided that a distance of 8mm from case are kept at ambient temperature
  - 3) Power derating: 4.0mW/°C above 50°C

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

# 1N746 thru 1N759

MCC PART NUMBER	NORMAL ZENER VOLTAGE $V_z @ I_{zt}$	TEST CURRENT $I_{zt}$	MAXIMUM ZENER IMPEDANCE $Z_{zt} @ I_{zt}$	MAXIMUM REVERSE LEAKAGE CURRENT $I_r @ V_r=1V$		MAXIMUM ZENER CURRENT $I_{zm}$	TYPICAL TEMP. COEFFICIENT
	VOLTS	mA	OHMS	$\mu A @ 25^\circ C$	$\mu A @ 125^\circ C$	mA	%/°C
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	$\pm 0.10$
1N752	5.6	20	11	1	20	65	+0.030
1N753	6.2	20	7.0	0.1	20	60	+0.049
1N754	6.8	20	5.0	0.1	20	55	+0.053
1N755	7.5	20	6.0	0.1	20	50	+0.057
1N756	8.2	20	8.0	0.1	20	45	+0.060
1N757	9.1	20	10	0.1	20	40	+0.061
1N758	10	20	17	0.1	20	35	+0.062
1N759	12	20	30	0.1	20	30	+0.062

Note:

- 1) Tested with pulses  $t_p = 20ms$
- 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.
- 5) Standard zener voltage tolerance is  $\pm 10\%$ , Add suffix "A" for  $\pm 5\%$  tolerance, "C" for  $\pm 2\%$  tolerance.



Micro Commercial Components

### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box
Part Number-BP	Bulk: 100Kpcs/Carton

**\*\*\*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.

**\*\*\*LIFE SUPPORT\*\*\***

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

**\*\*\*CUSTOMER AWARENESS\*\*\***

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.