

**Micro Commercial Components** 

### Features

Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates

**KOHS** 

Phone: (818) 701-4933

CA 91311

Fax:

**Micro Commercial Components** 

20736 Marilla Street Chatsworth

(818) 701-4939

- # # RoHS Compliant. See ordering information)
- Zener Voltage 3.3V to 12V and Low reverse leakage current
- Silicon Planar Power Zener Diodes
- Standards zener voltage tolerance is ±5%, other tolerances are available upon request

## **Mechanical Data**

- Case:Minimelf Package
- Polarity: Color band denotes cathode end
- Weight: Approx. 0.05gram
- Moisture Sensitivity Level 1

### **Maximum Ratings**

	Symbol	Value	Units
Zener Current		See Table 1	
Power Dissipation @ T <sub>A</sub> =50°C	P <sub>tot</sub>	500	mW
Junction Temperature	TJ	200	S
Storage Temperature Range	T <sub>STG</sub>	-65 to 200	S

### 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	$V_{F}$	1.5	V

**NOTE:** 1) Lead in Glass Exemption Applied, see EU Directive Annex 7(C)-I.

- 2) Valid provided that a distance of 8mm from case are kept at ambient temperature
- 3) Power derating: 4.0mW/°C above 50°C



## 0.5W Silicon Planar Zener Diodes



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.130	.146	3.30	3.70	
В	.008	.016	.20	.40	
C	.055	.059	1.40	1.50	Ø



# -www.mccsemi.com

#### **Revision:** B

# DL746A thru DL759A



	NORMAL	тгот	MAXIMUM			MAXIMUM	
MCC PART		IESI	ZENER		REVERSE	ZENER	
NUMBER	VOLTAGE	CURRENT	IMPEDANCE	LEAKAGE	CURRENT	CURRENT	TYPICAL TEMP.
Nomber	Vz@ Izt	lzt	Zzt @ Izt	lr @	Vr=1V	L	COEFFICIENT
	VOLTS	mA	OHMS	uA @25°C	uA @125ºC	mA	%/°C
DL746A	3.3	20	28	10	30	110	066
DL747A	3.6	20	24	10	30	100	058
DL748A	3.9	20	23	10	30	95	046
DL749A	4.3	20	22	2	30	85	033
DL750A	4.7	20	19	2	30	75	015
DL751A	5.1	20	17	1	20	70	±.010
DL752A	5.6	20	11	1	20	65	+.030
DL753A	6.2	20	7.0	0.1	20	60	+.049
DL754A	6.8	20	5.0	0.1	20	55	+.053
DL755A	7.5	20	6.0	0.1	20	50	+.057
DL756A	8.2	20	8.0	0.1	20	45	+.060
DL757A	9.1	20	10	0.1	20	40	+.061
DL758A	10	20	17	0.1	20	35	+.062
DL759A	12	20	30	0.1	20	30	+.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 cps, 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.

# www.mccsemi.com



### **Ordering Information :**

Device	Packing	
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel	

#### **\*\*\*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.

