

Micro Commercial Components

ROHS

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# **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

# **Mechanical Data**

Moisture Sensitivity: Level 1Case: 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	T₃	200	$^{\circ}$
Storage Temperature Range	$T_{STG}$	-65 to 200	ဇ

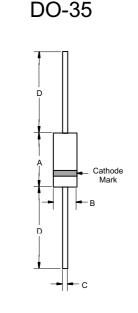
# Electrical Characteristics @ 25°C Unless Otherwise Specified

	Symbol	Maximum	Unit
Thermal resistance	$R_{ heta JA}$	300	°C/W
Forward Voltage @ I <sub>F</sub> =200mA	V <sub>F</sub>	1.5	V

## NOTE:

- ) 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

# 0.5W Silicon Planar Zener Diodes



DIMENSIONS					
	INCHES		ММ		
DIM	MIN	MAX	MIN	MAX	NOTE
Α		.166		4.2	
В		.079		2.00	
С		.020		.52	
D	1.000		25.40		

# 1N746 thru 1N759



MCC DADT	NORMAL ZENER	TEST	MAXIMUM ZENER	MAXIMUM	REVERSE	MAXIMUM ZENER	
MCC PART NUMBER	VOLTAGE	CURRENT	IMPEDANCE	LEAKAGE	CURRENT	CURRENT	TYPICAL TEMP.
NOMBER	Vz@ Izt	lzt	Zzt @ Izt	Ir @	Vr=1V	$L_{ZM}$	COEFFICIENT
	VOLTS	mA	OHMS	uA @25°C	uA @125°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	±.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  $t_p = 20$ 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.
- 5) Standard zener voltage tolerance is ±10%, Add suffix "A" for ±5% tolerance, "C" for ±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		

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