

# **Maximum Ratings** (@T<sub>A</sub> = +25°C, unless otherwise specified.)

Characteristic		Symbol	Value	Unit	
Forward Voltage	@ $I_F = 10mA$	V <sub>F</sub>	0.9	V	

## **Thermal Characteristics**

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 5)	$P_{D}$	400	mW
Thermal Resistance, Junction to Ambient Air (Note 5)	$R_{ hetaJA}$	312.5	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150	°C

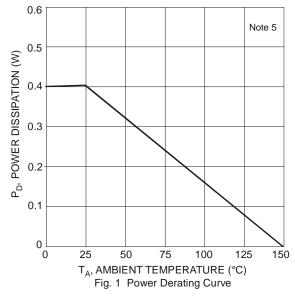
# Electrical Characteristics (@T<sub>A</sub> = +25°C, unless otherwise specified.)

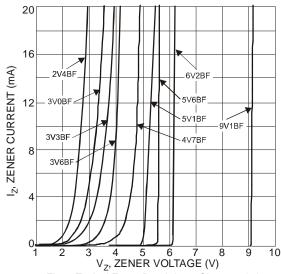
Type	Marking		oltage Rar Note 6)	nge	Maximum Zener Impedar f = 1kHz		laximum Zener Impedance f = 1kHz Maximum Reverse Current (Note 7)		Typical Temperature Coefficient	Typical Total Capacitance	
Number	Code	V <sub>Z</sub> (	@ I <sub>ZT</sub>	I <sub>ZT</sub>	$\mathbf{Z}_{ZT}  @  \mathbf{I}_{ZT}$	Z <sub>ZK</sub> @ I <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub>	@ <b>V</b> <sub>R</sub>	@ I <sub>ZT</sub> = 5mA	$@V_R = 0V,$ f = 1MHz
		Min (V)	Max (V)	mΑ	2	Ω	mA	μΑ	٧	mV/°C	pF
D3Z2V4BF	LO	2.43	2.63	5	100	1000	0.5	50	1	-1.6	215
D3Z2V7BF	L1	2.69	2.91	5	100	1000	0.5	20	1	-1.7	205
D3Z3V0BF	L2	2.85	3.07	5	95	1000	0.5	10	1	-1.7	195
D3Z3V3BF	L3	3.32	3.53	5	95	1000	0.5	5	1	-1.9	145
D3Z3V6BF	L4	3.60	3.85	5	90	500	1.0	5	1	-2.4	185
D3Z3V9BF	L5	3.89	4.16	5	90	500	1.0	3	1	-2.5	175
D3Z4V3BF	L6	4.17	4.48	5	90	600	1.0	3	1	-2.5	165
D3Z4V7BF	L7	4.55	4.75	5	90	600	1.0	2	1	-1.1	150
D3Z5V1BF	GM, L8	4.96	5.20	5	60	250	0.5	2	1.5	0.3	145
D3Z5V6BF	L9	5.48	5.73	5	50	100	0.5	1	2.5	1.7	20
D3Z6V2BF	LA	6.06	6.33	5	50	80	0.5	0.5	3	2.5	95
D3Z6V8BF	LB	6.65	6.93	5	40	60	0.5	0.5	3.5	3.4	82
D3Z7V5BF	LC	7.28	7.60	5	10	60	0.5	0.5	4	4.0	70
D3Z8V2BF	LD	8.02	8.36	5	10	60	0.5	0.5	5	4.6	57
D3Z9V1BF	LE	8.85	9.23	5	10	60	0.5	0.5	6	5.0	50
D3Z10BF	LF	9.77	10.21	5	10	60	0.5	0.1	7	6.1	45
D3Z11BF	LG	10.78	11.22	5	10	60	0.5	0.1	8	7.4	41
D3Z12BF	LH	11.74	12.24	5	10	80	0.5	0.1	9	8.2	36
D3Z13BF	LJ	12.91	13.49	5	10	80	0.5	0.1	10	9.4	33
D3Z15BF	LK	14.34	14.98	5	15	80	0.5	0.05	11	12.1	28
D3Z16BF	LL	15.85	16.51	5	20	80	0.5	0.05	12	13.7	25
D3Z18BF	LM	17.56	18.35	5	20	80	0.5	0.05	13	15.8	24
D3Z20BF	LN	19.52	20.39	5	20	100	0.5	0.05	15	16.4	22
D3Z22BF	LP	21.54	22.47	5	25	100	0.5	0.05	17	18.4	20
D3Z24BF	LQ	23.72	24.78	5	30	120	0.5	0.05	19	20.4	18
D3Z27BF	LR	26.19	27.53	5	40	150	0.5	0.05	21	18.0	17
D3Z30BF	LS	29.19	30.69	5	40	200	0.5	0.05	23	28.6	17
D3Z33BF	LT	32.15	33.79	5	40	250	0.5	0.05	25	32.2	15
D3Z36BF	LU	35.07	36.87	5	60	300	0.5	0.05	27	34.9	14

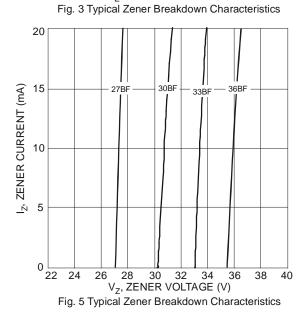
Notes:

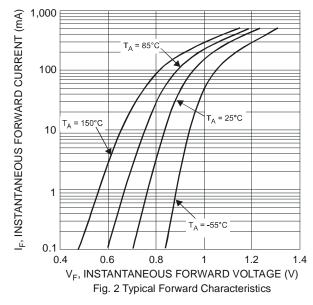
- 5. Device mounted on FR-4 PCB with suggested pad layout, board size 35mm \* 25mm.
  6. The Zener voltage is measured <40ms after power is supplied.</li>
  7. Short duration pulse test used to minimize self-heating effect.











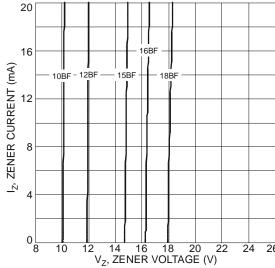


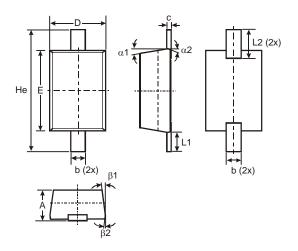
Fig. 4 Typical Zener Breakdown Characteristics



### **Package Outline Dimensions**

Please see AP02001 at http://www.diodes.com/\_files/datasheets/ap02001.pdf for the latest version.

### SOD323F

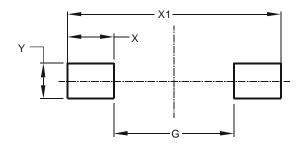


SOD323F					
Dim	Min	Max	Тур		
Α	0.60	0.75	-		
b	0.25	0.35	1		
С	0.05	0.26	_		
D	1.15	1.35	1.25		
Е	1.60	1.80	1.70		
He	2.30	2.70	2.50		
L1	0.30	0.50	0.40		
L2	0.41	0.61	0.51		
α1	_	-	7°		
α2	_	_	3°		
β1	-	-	7°		
β2	-	-	3°		
All I	All Dimensions in mm				

## **Suggested Pad Layout**

Please see AP02001 at http://www.diodes.com/\_files/datasheets/ap02001.pdf for the latest version.

### SOD323F



Dimensions	Value (in mm)
G	1.280
Х	0.710
X1	2.700
Y	0.403



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