

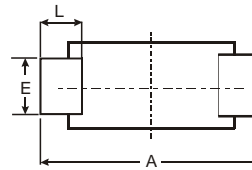
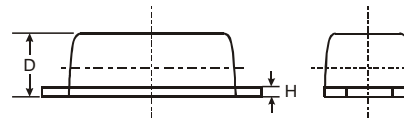
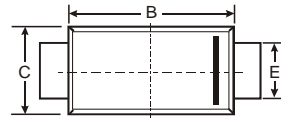
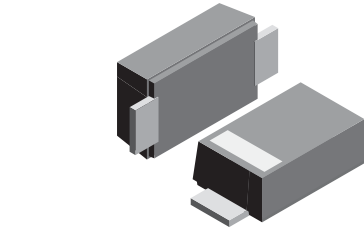
**VOLTAGE RANGE: 3.6 - 200V**  
**POWER: 0.15Watts**

### Features

- Silicon planar zener diodes.
- Low profile surface-mount package.
- Zener and surge current specification  
Low leakage current
- Excellent stability
- High temperature soldering guaranteed:  
265 /10 seconds, at terminals

### Mechanical Data

- Case: SOD-123FL  
plastic body over passivated junction
- Terminals : Plated axial leads,
- solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight:0.0007 ounce, 0.02 grams



SOD-123FL			
Dim	Min	Max	Typ
A	3.58	3.72	3.65
B	2.72	2.78	2.75
C	1.77	1.83	1.80
D	1.02	1.08	1.05
E	0.097	1.03	1.00
H	0.13	0.17	0.15
L	0.53	0.57	0.55
All Dimensions in mm			

### Maximum Ratings @ T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-repetitive peak pulse power dissipation with a 10/1000µs waveform (NOTE 1)	P <sub>PPM</sub>	0.15	Watts
Power dissipation at T <sub>A</sub> =25 (NOTE 2)	P <sub>tot</sub>	0.8	Watts
Maximum instantaneous forward voltage at 0.2A	V <sub>F</sub>	1.2	Volts
Thermal resistance junction to ambient	R <sub>θJA</sub>	180	K/W
Operating temperature junction range	T <sub>J</sub>	- 55 to +150	
Storage temperature range	T <sub>STG</sub>	- 55 to +150	

NOTES:(1)T<sub>J</sub>=25 prior to surge.

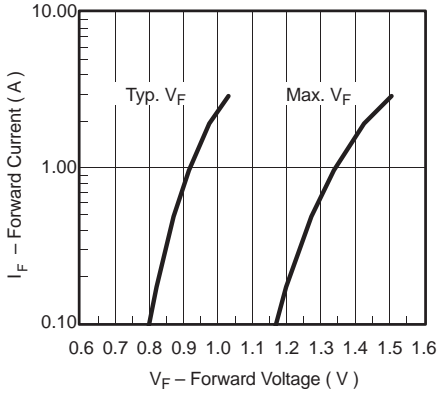
(2)Mounted on epoxy-glass PCB with 3×3 mm C<sub>μ</sub> pads( 40m thick)

(3)Non-repetitive peak reverse current in accordance with "IEC 60-1,Section 8" (10/1000 µs pulse)

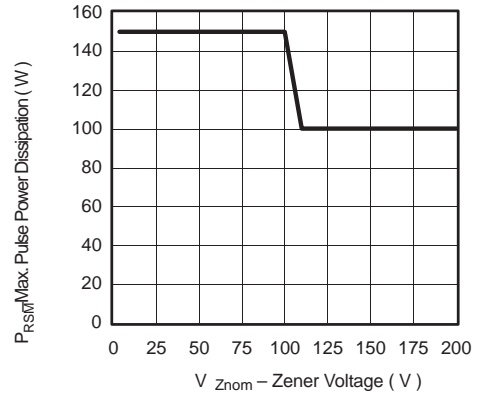
Type	Working voltage (NOTE 1)		Differential resistance		Temperature coefficient		Test current	Reverse current at reverse voltage	
	$V_z@I_{zT}$		$r_{dif}@I_z$		$\alpha_z@I_z$		$I_{zT}$	$I_R$	$V_R$
	V		$\Omega$		%/		m A	$\mu A$	V
	min	max	typ	max	min	max		max	
BZD27C3V6P	3.4	3.8	4	8	-0.14	-0.04	100	100	1
BZD27C3V9P	3.7	4.1	4	8	-0.14	-0.04	100	50	1
BZD27C4V3P	4	4.6	4	7	-0.12	-0.02	100	25	1
BZD27C4V7P	4.4	5	3	7	-0.1	0	100	10	1
BZD27C5V1P	4.8	5.4	3	6	-0.08	0.02	100	5	1
BZD27C5V6P	5.2	6	2	4	-0.04	0.04	100	10	2
BZD27C6V2P	5.8	6.6	2	3	-0.01	0.06	100	5	2
BZD27C6V8P	6.4	7.2	1	3	0	0.07	100	10	3
BZD27C7V5P	7	7.9	1	2	0	0.07	100	50	3
BZD27C8V2P	7.7	8.7	1	2	0.03	0.08	100	10	3
BZD27C9V1P	8.5	9.6	2	4	0.03	0.08	50	10	5
BZD27C10P	9.4	10.6	2	4	0.05	0.09	50	7	7.5
BZD27C11P	10.4	11.6	4	7	0.05	0.1	50	4.0	8.2
BZD27C12P	11.4	12.7	4	7	0.05	0.1	50	3.0	9.1
BZD27C13P	12.4	14.1	5	10	0.05	0.1	50	2	10
BZD27C15P	13.8	15.6	5	10	0.05	0.1	50	1	11
BZD27C16P	15.3	17.1	6	15	0.06	0.11	25	1	12
BZD27C18P	16.8	19.1	6	15	0.06	0.11	25	1	13
BZD27C20P	18.8	21.2	6	15	0.06	0.11	25	1	15
BZD27C22P	20.8	23.3	6	15	0.06	0.11	25	1	16
BZD27C24P	22.8	25.6	7	15	0.06	0.11	25	1	18
BZD27C27P	25.1	28.9	7	15	0.06	0.11	25	1	20
BZD27C30P	28	32	8	15	0.06	0.11	25	1	22
BZD27C33P	31	35	8	15	0.06	0.11	25	1	24
BZD27C36P	34	38	21	40	0.06	0.11	10	1	27
BZD27C39P	37	41	21	40	0.06	0.11	10	1	30
BZD27C43P	40	46	24	45	0.07	0.12	10	1	33
BZD27C47P	44	50	24	45	0.07	0.12	10	1	36
BZD27C51P	48	54	25	60	0.07	0.12	10	1	39
BZD27C56P	52	60	25	60	0.07	0.12	10	1	43
BZD27C62P	58	66	25	80	0.08	0.13	10	1	47
BZD27C68P	64	72	25	80	0.08	0.13	10	1	51
BZD27C75P	70	79	30	100	0.08	0.13	10	1	56
BZD27C82P	77	87	30	100	0.08	0.13	10	1	62
BZD27C91P	85	96	60	200	0.08	0.13	5	1	68
BZD27C100P	94	106	60	200	0.09	0.13	5	1	75
BZD27C110P	104	116	80	250	0.09	0.13	5	1	82
BZD27C120P	114	127	80	250	0.09	0.13	5	1	91
BZD27C130P	124	141	110	300	0.09	0.13	5	1	100
BZD27C150P	138	156	130	300	0.09	0.13	5	1	110
BZD27C160P	153	171	150	350	0.09	0.13	5	1	120
BZD27C180P	168	191	180	400	0.09	0.13	5	1	130
BZD27C200P	188	212	200	500	0.09	0.13	5	1	150

Note:1.Pulse test:tp 5ms.

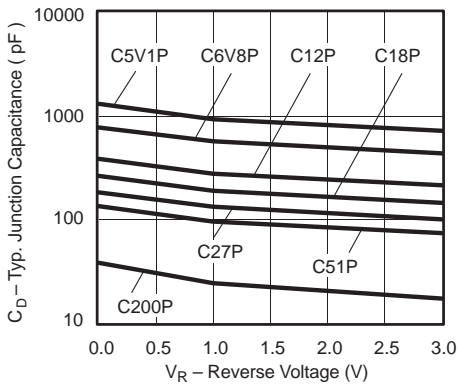
**Figure 1. Forward Current vs. Forward Voltage**



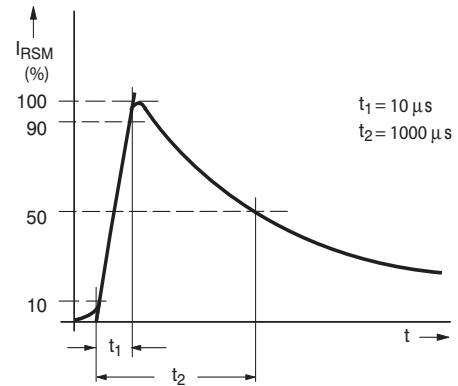
**Figure 2. Maximum Pulse Power Dissipation vs. Zener Voltage**



**Figure 3. Typ. Diode Capacitance vs. Reverse Voltage**



**Figure 4. Non-Repetitive Peak Reverse Current Pulse Definition**



**Figure 5. Power Dissipation vs. Ambient Temperature**

