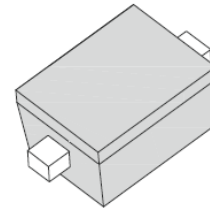


## 0.2W Surface Mount Zener Diodes

### Features

- Planar Die construction
- 200mW Power Dissipation
- Zener Voltage 3.9v to 75v
- Ideally Suited for Automated Assembly Processes
- RoHS Compliance



SOD-323F



### Mechanical Data

<b>Case:</b>	SOD-323F, molded plastic
<b>Epoxy:</b>	Plastic package has UL flammability 94V-0
<b>Terminals:</b>	Solderable per MIL-STD-202G, Method 208
<b>Polarity:</b>	Color band denotes cathode
<b>Approx Weight:</b>	0.0041 grams

### Maximum Ratings *(T<sub>Ambient</sub>=25°C unless noted otherwise)*

Symbol	Description	Value	Unit	Conditions
<b>*P<sub>tot</sub></b>	Power Dissipation	200	mW	T <sub>a</sub> =25 °C (Note 1)
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	2.0	A	(Note 2)
<b>T<sub>J</sub></b>	Operating Junction Temperature	150	°C	
<b>T<sub>STG</sub></b>	Storage Temperature Range	-65 to 150	°C	
<b>*R<sub>th(j-a)</sub></b>	Thermal Resistance-Junction to Ambient in free air	650	°C/W	

- Note:**
1. Mounted on 5.0mm<sup>2</sup> (0.13mm thick ) land areas
  2. Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum
  3. \*Valid that electrodes are kept at ambient temperature

## 0.2W Surface Mount Zener Diodes

### BZX384C3V9 - BZX384C75

#### Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Part NO.	Marking Code	Nominal Zener Voltage @ I <sub>ZT</sub>			Test Current	Max. Zener Impedance			Max. Reverse Leakage Current I <sub>R</sub> @ V <sub>R</sub>	
		V <sub>Z</sub> (V)				I <sub>ZT</sub> (mA)	Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @ I <sub>ZK</sub>	I <sub>ZK</sub> (mA)	I <sub>R</sub> (μA)
		Nom.	Min.	Max.						
BZX384C3V9	W6	3.9	3.7	4.1	5.0	95	600	1.0	3.00	1.0
BZX384C4V3	W7	4.3	4.0	4.6	5.0	90	600	1.0	3.00	1.0
BZX384C4V7	W8	4.7	4.4	5.0	5.0	80	500	1.0	3.00	2.0
BZX384C5V1	W9	5.1	4.8	5.4	5.0	60	480	1.0	2.00	2.0
BZX384C5V6	WA	5.6	5.2	6.0	5.0	40	400	1.0	1.00	2.0
BZX384C6V2	WB	6.2	5.8	6.6	5.0	10	150	1.0	3.00	4.0
BZX384C6V8	WC	6.8	6.4	7.2	5.0	15	80	1.0	2.00	4.0
BZX384C7V5	WD	7.5	7.0	7.9	5.0	15	80	1.0	1.00	5.0
BZX384C8V2	WE	8.2	7.7	8.7	5.0	15	80	1.0	0.70	5.0
BZX384C9V1	WF	9.1	8.5	9.6	5.0	15	100	1.0	0.50	6.0
BZX384C10	WG	10	9.4	10.6	5.0	20	150	1.0	0.20	7.0
BZX384C11	WH	11	10.4	11.6	5.0	20	150	1.0	0.10	8.0
BZX384C12	WI	12	11.4	12.7	5.0	25	150	1.0	0.10	8.0
BZX384C13	WK	13	12.4	14.1	5.0	30	170	1.0	0.10	8.0
BZX384C15	WL	15	13.8	15.6	5.0	30	200	1.0	0.05	10.5
BZX384C16	WM	16	15.3	17.1	5.0	40	200	1.0	0.05	11.2
BZX384C18	WN	18	16.8	19.1	5.0	45	225	1.0	0.05	12.6
BZX384C20	WO	20	18.8	21.2	5.0	55	225	1.0	0.05	14.0
BZX384C22	WP	22	20.8	23.3	5.0	55	250	1.0	0.05	15.4
BZX384C24	WR	24	22.8	25.6	5.0	70	250	1.0	0.05	16.8
BZX384C27	WS	27	25.1	28.9	2.0	80	300	0.5	0.05	18.9
BZX384C30	WT	30	28.0	32.0	2.0	80	300	0.5	0.05	21.0
BZX384C33	WU	33	31.0	35.0	2.0	80	325	0.5	0.05	23.1
BZX384C36	WW	36	34.0	38.0	2.0	90	350	0.5	0.05	25.2
BZX384C39	WX	39	37.0	41.0	2.0	130	350	0.5	0.05	27.3
BZX384C43	WY	43	40.0	46.0	2.0	150	375	0.5	0.05	30.1
BZX384C47	WZ	47	44.0	50.0	2.0	170	375	0.5	0.05	32.9
BZX384C51	X1	51	48.0	54.0	2.0	180	400	0.5	0.05	35.7
BZX384C56	X2	56	52.0	60.0	2.0	200	425	0.5	0.05	39.2
BZX384C62	X3	62	58.0	66.0	2.0	215	450	0.5	0.05	43.4
BZX384C68	X4	68	64.0	72.0	2.0	240	475	0.5	0.05	47.6
BZX384C75	X5	75	70.0	79.0	2.0	255	500	0.5	0.05	52.2

# 0.2W Surface Mount Zener Diodes

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### Typical Characteristics Curves

Fig.1- Power Dissipation

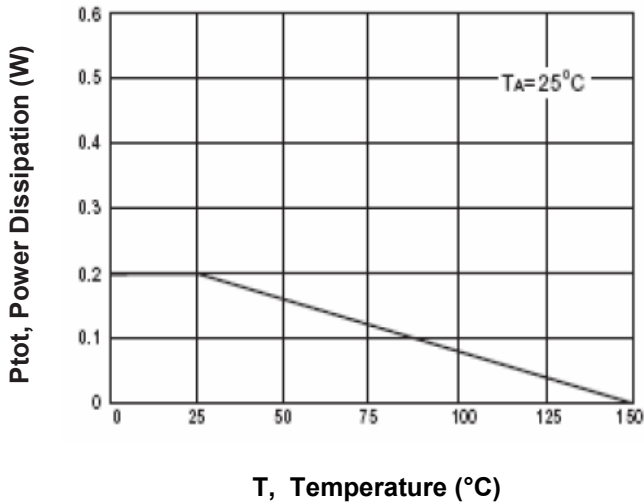


Fig.2- Typical Forward Characteristic

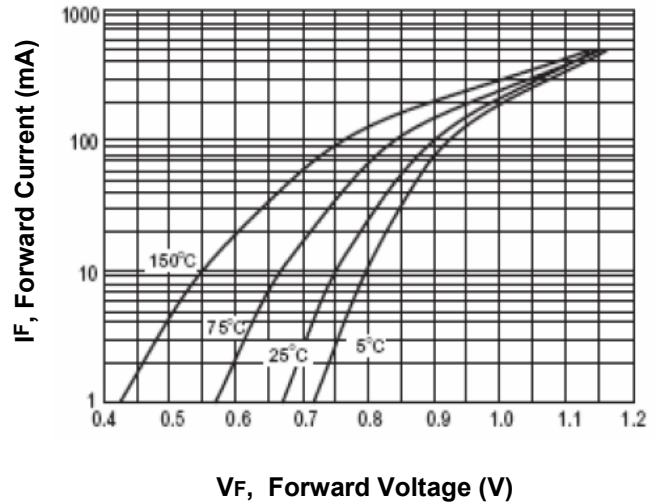


Fig.3-Typical Zener Impedance

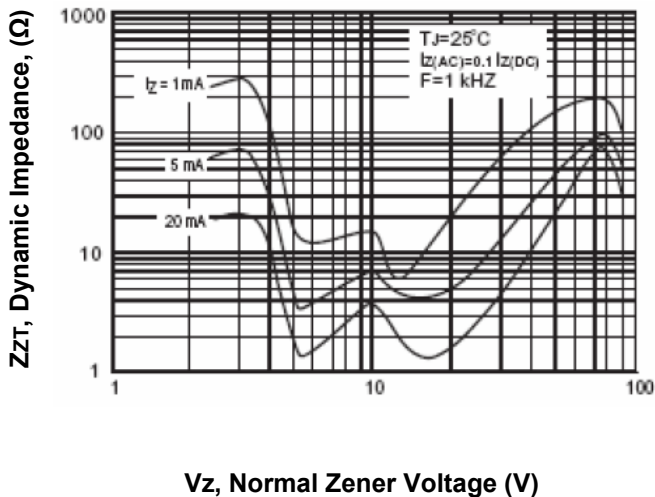
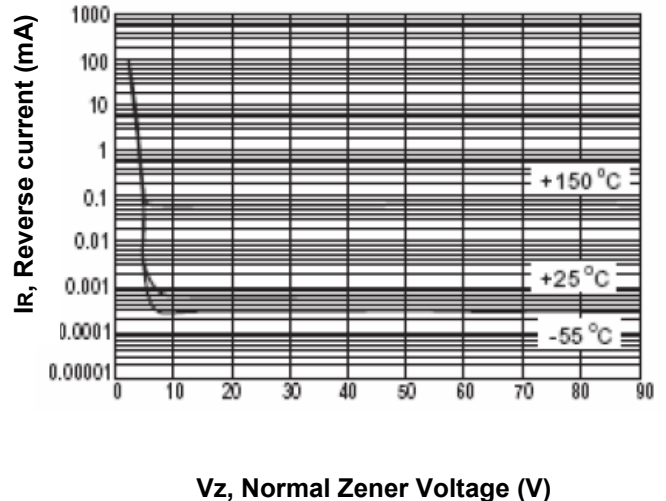


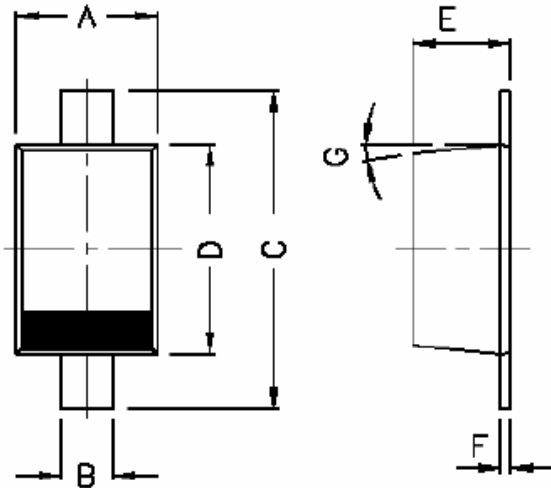
Fig.4-Typical Reverse Characteristics



# 0.2W Surface Mount Zener Diodes

## BZX384C3V9 - BZX384C75

### Dimensions in mm



DIM	MIN.	MAX.
A	1.15	1.35
B	0.25	0.40
C	2.30	2.80
D	1.60	1.80
E	0.80	1.10
F	0.00	0.15
G	5 DEG	

SOD-323F

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