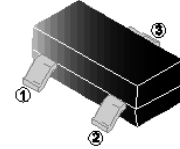


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Planar Die Construction
- 350mW Power Dissipation
- General Purpose, Medium Current
- Ideally Suited for Automated Assembly Process
- Zener Voltages from 2.4V~75V
- Ultra-Small Surface Mount Package Power Dissipation

SOT-23

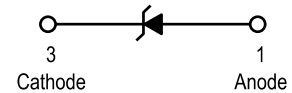


MECHANICAL DATA

- Case: SOT-23, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagrams

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch



ORDER INFORMATION

Part Number	Type
BZX84Cxxx-C	Lead (Pb)-free and Halogen-free

ABSOLUTE MAXIMUM RATINGS (Rating 25°C ambient temperature unless otherwise specified)

Characteristic	Symbol	Value	Units
Forward Voltage @ $I_F=10\text{mA}$	V_F	0.9	V
Power Dissipation	P_D	350	mW
Peak Forward Surge Current	I_{FSM}	2	A
Thermal Resistance, Junction-Ambient	$R_{\theta JA}$	357	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	150, -55~150	°C

ELECTRICAL RATINGS (Rating 25°C ambient temperature unless otherwise specified)

Type Number	Marking Code	Zener Voltage Range ¹			Maximum Zener Impedance			Maximum Reverse Current		
		$V_Z @ I_{ZT}$			I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	I_{ZK}	$I_R @ V_R$	
		Min.	Nom.	Max.						
		V			mA	Ω		mA	μA	V
BZX84C2V4-C	Z11 / KZB	2.28	2.4	2.52	5	100	600	1	50	1
BZX84C2V7-C	W2 / Z12 / KZC	2.5	2.7	2.9	5	100	600	1	20	1
BZX84C3V0-C	Z13 / KZD	2.8	3	3.2	5	95	600	1	10	1
BZX84C3V3-C	Z14 / KZE	3.1	3.3	3.5	5	95	600	1	5	1
BZX84C3V6-C	Z15 / KZF	3.4	3.6	3.8	5	90	600	1	5	1
BZX84C3V9-C	Z16 / KZG	3.7	3.9	4.1	5	90	600	1	3	1
BZX84C4V3-C	Z17 / KZH	4	4.3	4.6	5	90	600	1	3	1

ELECTRICAL RATINGS (Rating 25°C ambient temperature unless otherwise specified)

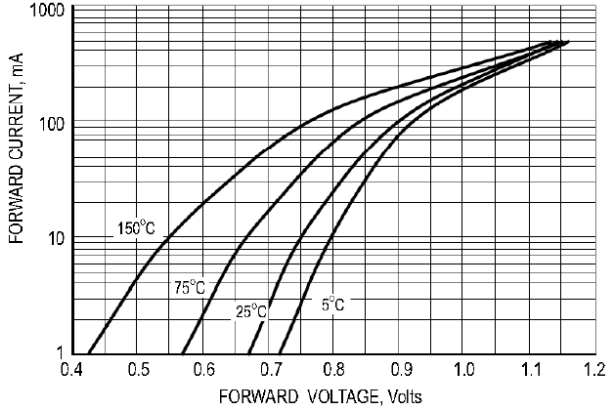
Type Number	Marking Code	Zener Voltage Range ¹				Maximum Zener Impedance			Maximum Reverse Current	
		V _Z @ I _{ZT}			I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R @ V _R	
		Min.	Nom.	Max.					μA	V
		V			mA	Ω	mA			
BZX84C4V7-C	Z1 / KZ1	4.4	4.7	5	5	80	500	1	3	2
BZX84C5V1-C	Z2 / KZ2	4.8	5.1	5.4	5	60	480	1	2	2
BZX84C5V6-C	Z3 / KZ3	5.2	5.6	6	5	40	400	1	1	2
BZX84C6V2-C	Z4 / KZ4	5.8	6.2	6.6	5	10	150	1	3	4
BZX84C6V8-C	Z5 / KZ5	6.4	6.8	7.2	5	15	80	1	2	4
BZX84C7V5-C	Z6 / KZ6	7	7.5	7.9	5	15	80	1	1	5
BZX84C8V2-C	Z7 / KZ7	7.7	8.2	8.7	5	15	80	1	0.7	5
BZX84C9V1-C	Z8 / KZ8	8.5	9.1	9.6	5	15	100	1	0.5	6
BZX84C10-C	Z9 / KZ9	9.4	10	10.6	5	20	150	1	0.2	7
BZX84C11-C	Y1 / Y1· / KY1	10.4	11	11.6	5	20	150	1	0.1	8
BZX84C12-C	Y2 / Y2· / KY2	11.4	12	12.7	5	25	150	1	0.1	8
BZX84C13-C	Y3 / KY3	12.4	13	14.1	5	30	170	1	0.1	8
BZX84C15-C	Y4 / KY4	13.8	15	15.6	5	30	200	1	0.1	10.5
BZX84C16-C	Y5 / KY5	15.3	16	17.1	5	40	200	1	0.1	11.2
BZX84C18-C	Y6 / Y6· / KY6	16.8	18	19.1	5	45	225	1	0.1	12.6
BZX84C20-C	Y7 / KY7	18.8	20	21.2	5	55	225	1	0.1	14
BZX84C22-C	Y8 / KY8	20.8	22	23.3	5	55	250	1	0.1	15.4
BZX84C24-C	Y9 / KY9	22.8	24	25.6	5	70	250	1	0.1	16.8
BZX84C27-C	Y10 / KYA	25.1	27	28.9	2	80	300	0.5	0.1	18.9
BZX84C30-C	Y11 / Y11· / KYB	28	30	32	2	80	300	0.5	0.1	21
BZX84C33-C	Y12 / KYC	31	33	35	2	80	325	0.5	0.1	23.1
BZX84C36-C	Y13 / KYD	34	36	38	2	90	350	0.5	0.1	25.2
BZX84C39-C	Y14 / KYE	37	39	41	2	130	350	0.5	0.1	27.3
BZX84C43	Y15	40.85	43	45.15	2	150	375	0.5	0.1	30.1
BZX84C47	Y16	44.65	47	49.35	2	170	375	0.5	0.1	32.9
BZX84C51	Y17	48.45	51	53.55	2	180	400	0.5	0.1	35.7
BZX84C56	Y18	53.2	56	58.8	2	200	425	0.5	0.05	39.2
BZX84C62	Y19	58.9	62	65.1	2	215	450	0.5	0.05	43.4
BZX84C68	Y20	64.6	68	71.4	2	240	475	0.5	0.05	47.6
BZX84C75	Y21	71.25	75	78.75	2	255	500	0.5	0.05	52.5

Note:

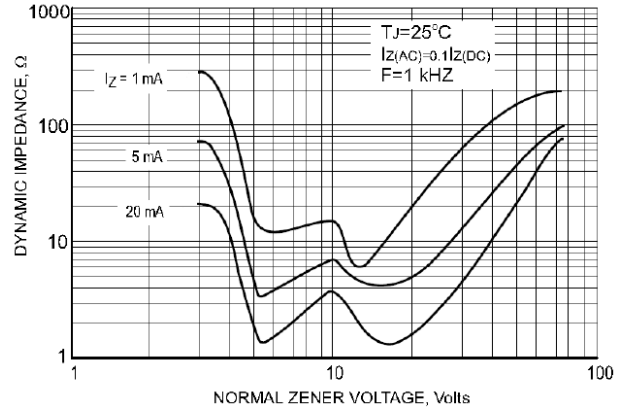
- Pulse Width = 10 Ms

CHARACTERISTIC CURVES

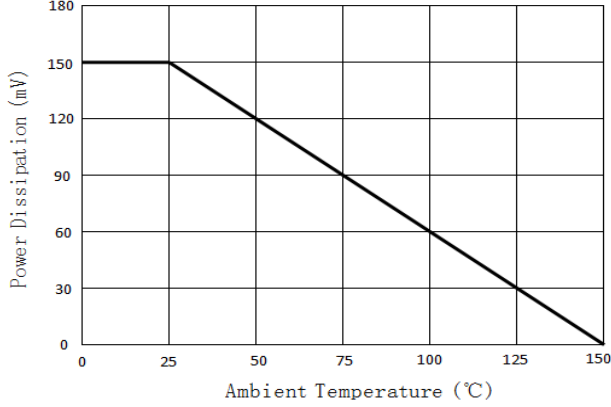
Typical Forward Voltage



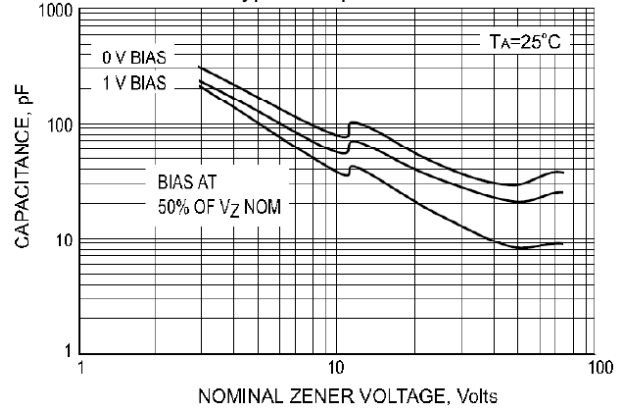
Effect of Zener Voltage on Zener Impedance



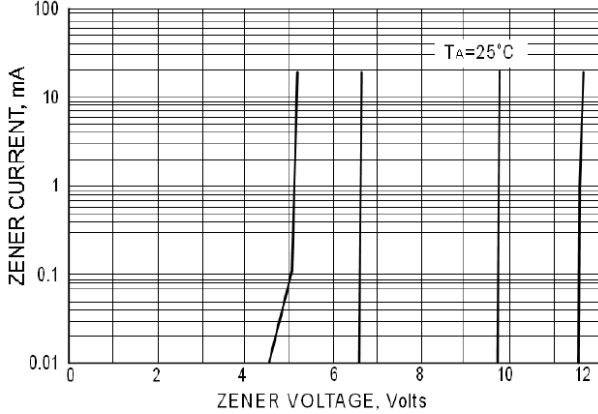
Power Dissipation vs. Ambient Temp.



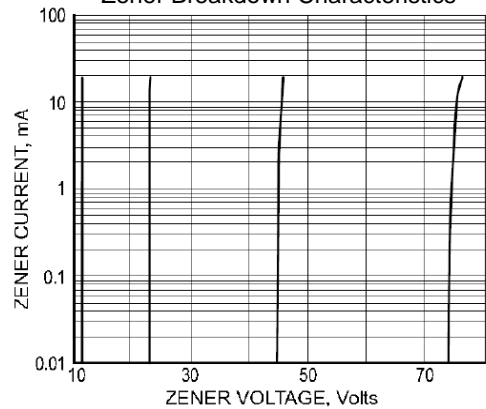
Typical Capacitance



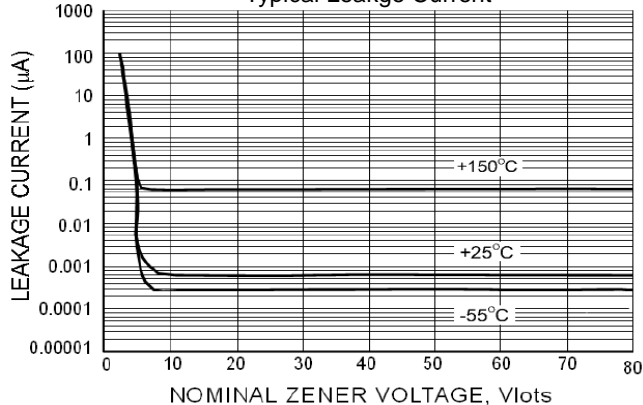
Zener Breakdown Characteristics



Zener Breakdown Characteristics

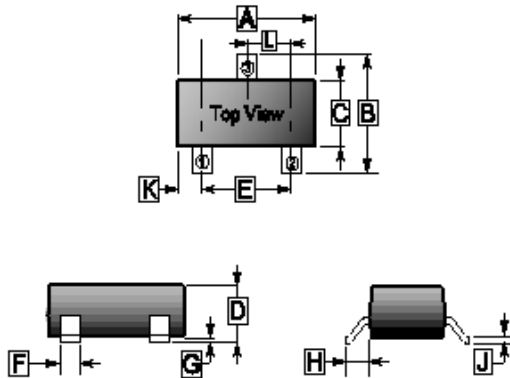


Typical Leakage Current



PACKAGE OUTLINE DIMENSIONS

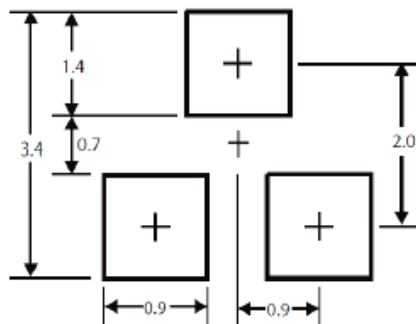
SOT-23



REF.	Millimeter	
	Min.	Max.
A	2.65	3.10
B	2.10	3.00
C	1.10	1.80
D	0.89	1.40
E	1.70	2.30
F	0.28	0.55
G	0	0.18
H	0.55 REF.	
J	0.05	0.26
K	0.60 REF.	
L	0.95 TYP.	

MOUNTING PAD LAYOUT

SOT-23



*Dimensions in millimeters