

SILICON PLANAR ZENER DIODES

BZX384C 4V7 to 75V



**SOD-323
PLASTIC PACKAGE**

Marking: As indicated below with cathode band

ABSOLUTE MAXIMUM RATINGS (T_{amb}=25°C)

DESCRIPTION	SYMBOL	VALUE	UNIT
Power Dissipation	*P _{tot}	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	- 65 to +150	°C
Thermal Resistance - Junction to Ambient in free air	*R _{th(j-a)}	650	°C/W

*Valid that electrodes are kept at ambient temperature

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless specified otherwise) VF @ 100mA <1.0 V

Device	Zener Voltage Range		Dynamic Resistance		Test Current	Temperature Coefficient of Zener Voltage		Test Current @ I _{ZT2}	Reverse Leakage Current		Marking Code
	V _Z @ I _{ZT}		r _{Zj} @ I _{ZT1}	r _{Zj} @ I _{ZT2}		I _{ZT1}	a V _Z @ I _{ZT1}		I _R @	V _R	
	(V)		(W)	(W)	(mA)	10 ⁻⁴ /°C		(mA)	(V)		
	min	max	max	max		max	min	max			
BZX384C4V7	4.40	5.00	80	500	5	-5	2	1.0	3.0	2.0	W8
BZX384C5V1	4.80	5.40	60	480	5	-3	4	1.0	2.0	2.0	W9
BZX384C5V6	5.20	6.00	40	400	5	-2	6	1.0	1.0	2.0	WA
BZX384C6V2	5.80	6.60	10	150	5	-1	7	1.0	3.0	4.0	WB
BZX384C6V8	6.40	7.20	15	80	5	2	7	1.0	2.0	4.0	WC
BZX384C7V5	7.00	7.90	15	80	5	3	7	1.0	1.0	5.0	WD
BZX384C8V2	7.70	8.70	15	80	5	4	7	1.0	0.7	5.0	WE
BZX384C9V1	8.50	9.60	15	100	5	5	8	1.0	0.5	6.0	WF
BZX384C10	9.40	10.60	20	150	5	5	8	1.0	0.2	7.0	WG
BZX384C11	10.40	11.60	20	150	5	5	9	1.0	0.1	8.0	WH
BZX384C12	11.40	12.70	25	150	5	6	9	1.0	0.1	8.0	WI
BZX384C13	12.40	14.10	30	170	5	7	9	1.0	0.1	8.0	WK
BZX384C15	13.80	15.60	30	200	5	7	9	1.0	0.05	10.5	WL
BZX384C16	15.30	17.10	40	200	5	8	9.5	1.0	0.05	11.2	WM
BZX384C18	16.80	19.10	45	225	5	8	9.5	1.0	0.05	12.6	WN
BZX384C20	18.80	21.20	55	225	5	8	10	1.0	0.05	14	WO
BZX384C22	20.80	23.30	55	250	5	8	10	1.0	0.05	15.4	WP
BZX384C24	22.80	25.60	70	250	5	8	10	1.0	0.05	16.8	WR
BZX384C27	25.10	28.90	80	300	2	8	10	0.5	0.05	18.9	WS
BZX384C30	28.00	32.00	80	300	2	8	10	0.5	0.05	21	WT
BZX384C33	31.00	35.00	80	325	2	8	10	0.5	0.05	23.1	WU
BZX384C36	34.00	38.00	90	350	2	8	10	0.5	0.05	25.2	WW
BZX384C39	37.00	41.00	130	350	2	10	12	0.5	0.05	27.3	WX
BZX384C43	40.00	46.00	150	375	2	10	12	0.5	0.05	30.1	WY
BZX384C47	44.00	50.00	170	375	2	10	12	0.5	0.05	32.9	WZ

Measured with pulse t_p=5ms

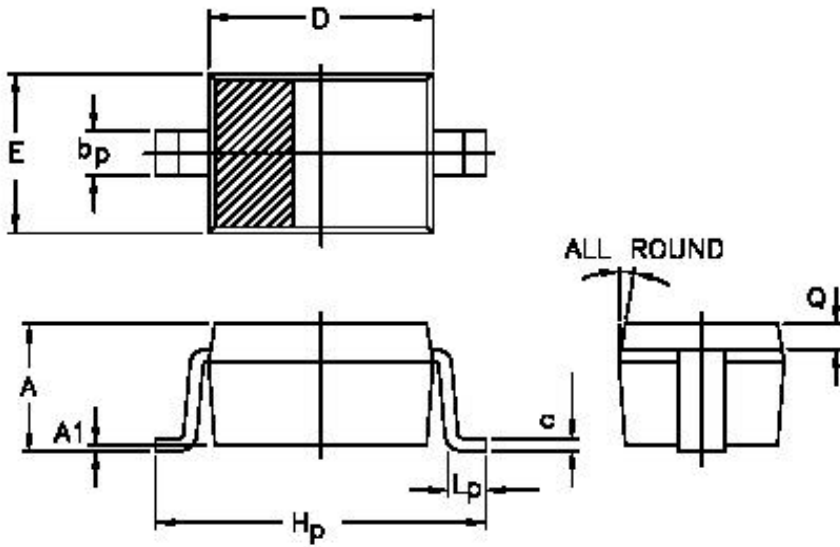
BZX384C4V7_75V Rev_100904E

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless specified otherwise) VF @ 100mA <1.0 V

Device	Zener Voltage Range tolerance $\pm 5\%$		Dynamic Resistance		Test Current	Temperature Coefficient of Zener Voltage		Test Current @ I_{ZT2}	Reverse Leakage Current		Marking Code
	$V_Z @ I_{ZT}$		$r_{Zj} @ I_{ZT1}$	$r_{Zj} @ I_{ZT2}$		I_{ZT1}	$a V_Z @ I_{ZT1}$		I_R	V_R	
	(V)		(W)	(W)	(mA)	$10^{-4}/^{\circ}\text{C}$		(mA)	(V)		
	min	max	max	max		min	max	max			
BZX384C51	48.00	54.00	180	400	2	10	12	0.5	0.05	35.7	X1
BZX384C56	52.00	60.00	200	425	2	9	11	0.5	0.05	39.2	X2
BZX384C62	58.00	66.00	215	450	2	9	12	0.5	0.05	43.4	X3
BZX384C68	64.00	72.00	240	475	2	10	12	0.5	0.05	47.6	X4
BZX384C75	70.00	79.00	255	500	2	10	12	0.5	0.05	52.5	X5

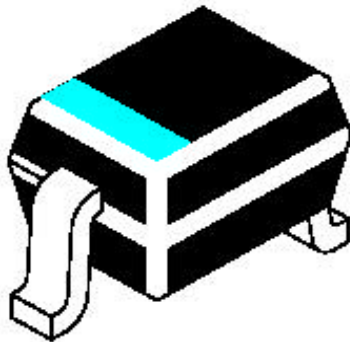
Measured with pulse $t_p=5\text{ms}$

BZX384C4V7_75V Rev_100904E

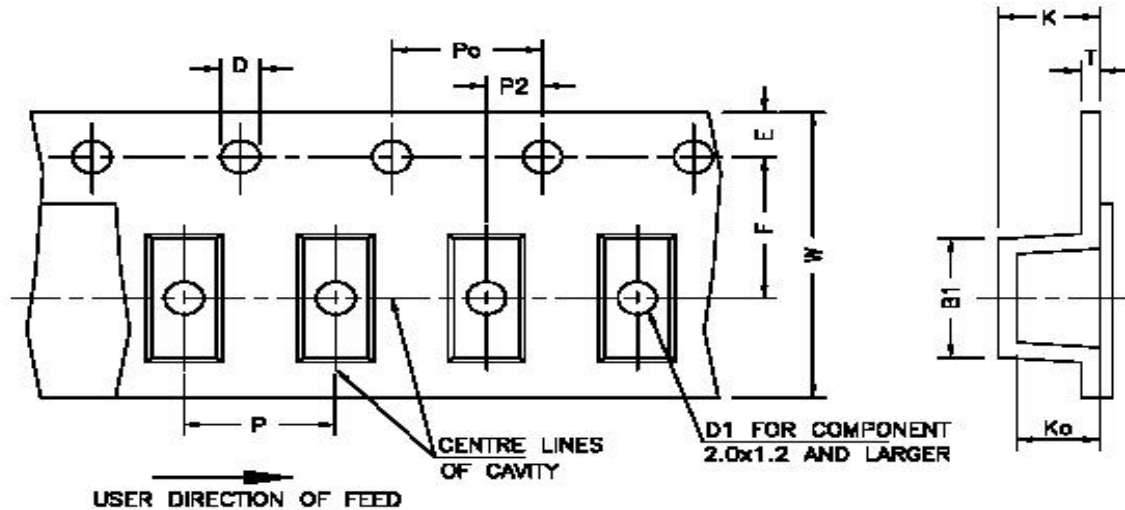


DIM	MIN.	MAX.
A	0.95	1.05
A1	0.0	0.1
bp	0.3	0.4
c	0.127	0.135
D	1.65	1.75
E	1.2	1.3
Hp	2.3	2.7
Lp	0.2	0.4
Q	0.15	0.25

Cathode is marked by Band



EMBOSSED TAPE & REEL DATA FOR DISCRETES CARRIER TAPE SPECIFICATIONS

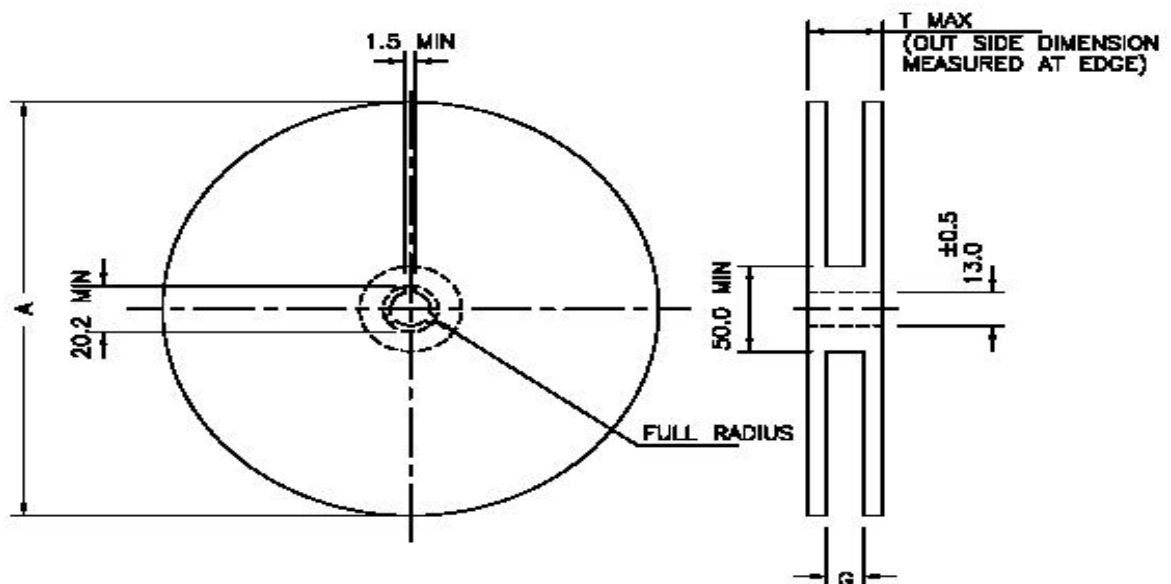


DIMENSIONS

TAPE SIZE	B1 MAX	D	D1	E	F	K	Po	P2	T MAX	W MAX
8.0	4.55	1.5 ±0.1	1.0 MIN	1.75 ±0.1	3.5 ±0.05	2.4 MAX	4.0 ±0.1	2.0 ±0.1	0.6	8.3

ALL DIMENSIONS ARE IN mm

EMBOSSED TAPE & REEL DATA FOR DISCRETES



DIMENSIONS

SIZE	A MAX	G	T MAX
8.0	330.0	8.4 +1.5, -0.0	14.4

ALL DIMENSIONS ARE IN mm

DEVICES PER REEL :- 10,000 Pcs

Disclaimer

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