SEMICONDUCTOR

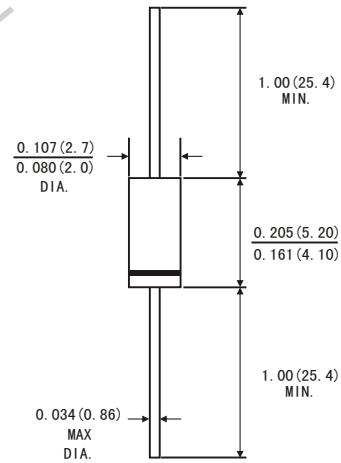
BZX2C3V6 THRU BZX2C 200

2W SILICON PLANAR ZENER DIODES

FEATURES

- For use in stabilizing and clipping circuits with high power rating.
- The Zener voltage is graded according to the international E24 standard.
- Other voltage tolerance and higher Zener voltages are on request.
- High temperature soldering guaranteed:260℃/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

DO-41(GLASS)



Dimensions in inches and (millimeters)

MECHANICAL DATA

- *Case*: DO-41 glass case
- *Weight*: Approx. 0.35 gram

ABSOLUTE MAXIMUM RATINGS(LIMITING VALUES) (T_A=25℃)

	Symbols	*Value*	*Units*
Zener current see table "Characteristics"			
Power dissipation at T_A=25℃	P_{tot}	2 [1)]	W
Junction temperature	T_J	175	℃
Storage temperature range	T_{STG}	-65 to+175	℃

ELECTRICAL CHARACTERISTICS (T_A=25℃)

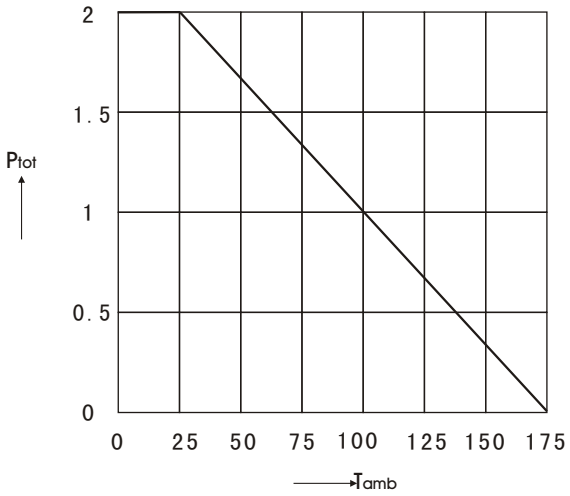
	Symbols	*Min*	*Typ*	*Max*	*Units*
Forward voltage at I_F=200mA	V_F			1.2	V

1) Valid provided that a distance of 8mm from case is kept at ambient temperature

BZX2C3V6 ... BZX2C200 SILICON PLANAR ZENER DIODES

Type	Zener Voltage Range			Dynamic Resistance			Reverse leakage current (I_R at V_R)		Maximum DC Zener Current [2]
	V_Z V	V_{ZT} at I_{ZT} V	I_{ZT} mA	Ohm at I_{ZT}	Ohm at I_{ZK}	I_{ZK} mA	I_R uA	V_R V	I_{ZM} mA
BZX2C3V6	3.6	3.4...3.8	139	5	400	1	80	1	504
BZX2C3V9	3.9	3.7...4.1	128	5	400	1	30	1	468
BZX2C4V3	4.3	4.0...4.6	116	4.5	400	1	20	1	434
BZX2C4V7	4.7	4.4...5.0	106	4.5	550	1	5	1	386
BZX2C5V1	5.1	4.8...5.4	98	3.5	600	1	5	1	356
BZX2C5V6	5.6	5.2...6.0	89.5	2.5	650	1	5	2	324
BZX2C6V2	6.2	5.8...6.6	80.5	1.5	700	1	5	3	292
BZX2C6V8	6.8	6.4...7.2	73.5	2	700	1	5	4	266
BZX2C7V5	7.5	7.0...7.9	66.5	2	700	0.5	5	5	242
BZX2C8V2	8.2	7.7...8.7	61	2.3	700	0.5	5	6	220
BZX2C9V1	9.1	8.5...9.6	55	2.5	700	0.5	2	7	200
BZX2C10	10	9.4...10.6	50	3.5	700	0.25	3	7.6	182
BZX2C11	11	10.4...11.6	45.5	4	700	0.25	1	8.4	166
BZX2C12	12	11.4...12.7	41.5	4.5	700	0.25	1	9.1	152
BZX2C13	13	12.4...14.1	38.5	5	700	0.25	0.5	9.9	138
BZX2C15	15	13.8...15.6	33.4	7	700	0.25	0.5	11.4	122
BZX2C16	16	15.3...17.1	31.2	8	700	0.25	0.5	12.2	114
BZX2C18	18	16.8...19.1	27.8	10	750	0.25	0.5	13.7	100
BZX2C20	20	18.8...21.2	25	11	750	0.25	0.5	15.2	90
BZX2C22	22	20.8...23.3	22.8	12	750	0.25	0.5	16.7	82
BZX2C24	24	22.8...25.6	20.8	13	750	0.25	0.5	18.2	76
BZX2C27	27	25.1...28.9	18.5	18	750	0.25	0.5	20.6	68
BZX2C30	30	28...32	16.6	20	1,000	0.25	0.5	22.5	60
BZX2C33	33	31...35	15.1	23	1,000	0.25	0.5	25.1	55
BZX2C36	36	34...38	13.9	25	1,000	0.25	0.5	27.4	50
BZX2C39	39	37...41	12.8	30	1,000	0.25	0.5	29.7	47
BZX2C43	43	40...46	11.6	35	1,500	0.25	0.5	32.7	43
BZX2C47	47	44...50	10.6	40	1,500	0.25	0.5	35.8	39
BZX2C51	51	48...54	9.8	48	1,500	0.25	0.5	38.8	36
BZX2C56	56	52...60	9	55	2,000	0.25	0.5	42.6	32
BZX2C62	62	58...66	8.1	60	2,000	0.25	0.5	47.1	29
BZX2C68	68	64...72	7.4	75	2,000	0.25	0.5	51.7	27
BZX2C75	75	70...79	6.7	90	2,000	0.25	0.5	56	24
BZX2C82	82	77...87	6.1	100	3,000	0.25	0.5	62.2	22
BZX2C91	91	85...96	5.5	125	3,000	0.25	0.5	69.2	20
BZX2C100	100	94...106	5	175	3,000	0.25	0.5	76	18
BZX2C110	110	104...116	4.5	250	4,000	0.25	0.5	83.6	17
BZX2C120	120	114...127	4.2	325	4,500	0.25	0.5	91.2	15
BZX2C130	130	124...141	3.8	400	5,000	0.25	0.5	98.8	14
BZX2C150	150	138...156	3.3	575	6,000	0.25	0.5	114	12
BZX2C160	160	153...171	3.1	650	6,500	0.25	0.5	121.6	11
BZX2C180	180	168...191	2.8	725	7,000	0.25	0.5	136.8	10
BZX2C200	200	188...212	2.5	900	8,000	0.25	0.5	152	9

Note 1) Tested with pulse tp=20ms
2) Valid provided that leads are kept at ambient temperature at a distance of 8mm from case



Power Dissipation (W) - Versus-Temperature