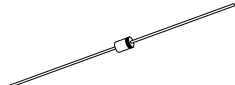


**BZX85C3V3
THRU
BZX85C33**

**SURFACE MOUNT
1.3W SILICON ZENER DIODE
3.3 VOLTS THRU 33 VOLTS**



DO-41 CASE

Central™

Semiconductor Corp.

Description:

The CENTRAL SEMICONDUCTOR BZX85C3V3 Series are silicon Zener diodes. These high quality voltage regulating diodes are designed for use in industrial, commercial, entertainment and computer applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

Power Dissipation
Operating and Storage Temperature

SYMBOL

P_D 1.3
 T_J, T_{stg} -65 to +200

UNITS

W
 $^\circ\text{C}$

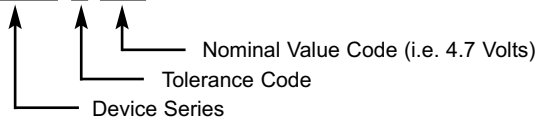
ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$) $V_F=1.2\text{V MAX @ } I_F=200\text{mA}$ (for all types)

Type	Zener Voltage $V_Z @ I_{ZT}$			Test Current I_{ZT} (mA)	Maximum Zener Impedance			Maximum Reverse Current		Maximum Reverse Surge Current I_{RSM} (mA)	Maximum Zener Current I_{ZM} (mA)
	MIN (V)	NOM (V)	MAX (V)		$Z_{ZT} @ I_{ZT}$ (Ω)	$Z_{ZK} @ I_{ZK}$ (Ω)	$I_R @ V_R$ (μA)	V_R (V)			
BZX85C3V3	3.1	3.3	3.5	80	20	400	1.0	60	1.0	1,380	276
BZX85C3V6	3.4	3.6	3.8	60	15	500	1.0	30	1.0	1,260	252
BZX85C3V9	3.7	3.9	4.1	60	15	500	1.0	5.0	1.0	1,190	234
BZX85C4V3	4.1	4.3	4.5	50	13	500	1.0	3.0	1.0	1,070	217
BZX85C4V7	4.5	4.7	4.9	45	13	600	1.0	3.0	1.5	970	193
BZX85C5V1	4.8	5.1	5.4	45	10	500	1.0	1.0	2.0	890	178
BZX85C5V6	5.3	5.6	5.9	45	7.0	400	1.0	1.0	2.0	810	162
BZX85C6V2	5.9	6.2	6.5	35	4.0	300	1.0	1.0	3.0	730	146
BZX85C6V8	6.5	6.8	7.1	35	3.5	300	1.0	1.0	4.0	660	133
BZX85C7V5	7.1	7.5	7.9	35	3.0	200	1.0	1.0	4.5	605	121
BZX85C8V2	7.8	8.2	8.6	25	5.0	200	0.5	1.0	5.0	550	110
BZX85C9V1	8.6	9.1	9.6	25	5.0	200	0.5	1.0	6.5	500	100
BZX85C10	9.5	10	10.5	25	7.0	200	0.5	0.5	7.0	454	91
BZX85C11	10.5	11	11.6	20	8.0	300	0.5	0.5	7.7	414	83
BZX85C12	11.4	12	12.6	20	9.0	350	0.5	0.5	8.4	380	76

Tolerance Code	Tolerance
A	$\pm 1\%$
B	$\pm 2\%$
C	$\pm 5\%$

Part Number Identification

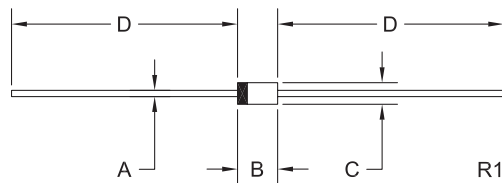
BZX85C4V7



ELECTRICAL CHARACTERISTICS - Continued: ($T_A=25^\circ\text{C}$) $V_F=1.2\text{V MAX @ } I_F=200\text{mA}$ (for all types)

Type	Zener Voltage $V_Z @ I_{ZT}$			Test Current I_{ZT} (mA)	Maximum Zener Impedance			Maximum Reverse Current		Maximum Reverse Surge Current I_{RSM} (mA)	Maximum Zener Current I_{ZM} (mA)
	MIN (V)	NOM (V)	MAX (V)		$Z_{ZT}@I_{ZT}$ (Ω)	$Z_{ZK} @ I_{ZK}$ (Ω)	$I_R @ V_R$ (μA)	V_R (V)			
BZX85C13	12.4	13	13.7	20	10	400	0.5	0.5	9.1	344	69
BZX85C15	14.3	15	15.8	15	15	500	0.5	0.5	10.5	304	61
BZX85C16	15.2	16	16.8	15	15	500	0.5	0.5	11.0	285	57
BZX85C18	17.1	18	18.9	15	20	500	0.5	0.5	12.5	250	50
BZX85C20	19.0	20	21.0	10	24	600	0.5	0.5	14.0	225	45
BZX85C22	20.9	22	23.1	10	25	600	0.5	0.5	15.5	205	41
BZX85C24	22.8	24	25.2	10	25	600	0.5	0.5	17.0	190	38
BZX85C27	25.7	27	28.4	8.0	30	750	0.25	0.5	19.0	170	34
BZX85C30	28.5	30	31.5	8.0	30	1,000	0.25	0.5	21.0	150	30
BZX85C33	31.4	33	34.7	8.0	35	1,200	0.25	0.5	23.0	135	27

DO-41 CASE - MECHANICAL OUTLINE



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.028	0.034	0.71	0.86
B	0.160	0.205	4.06	5.21
C	0.080	0.107	2.03	2.72
D	1.000	-	25.40	-

DO-41 (REV: R1)

R0 (12-May 2009)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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