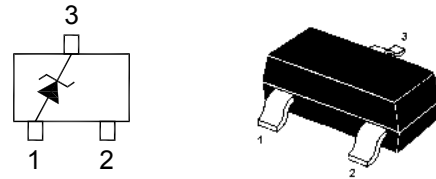


# Zener Diodes

## Features

- Zener breakdown voltage range 2.0 V to 75 V
- Package designed for optimal automated board assembly
- Small package size for high density applications

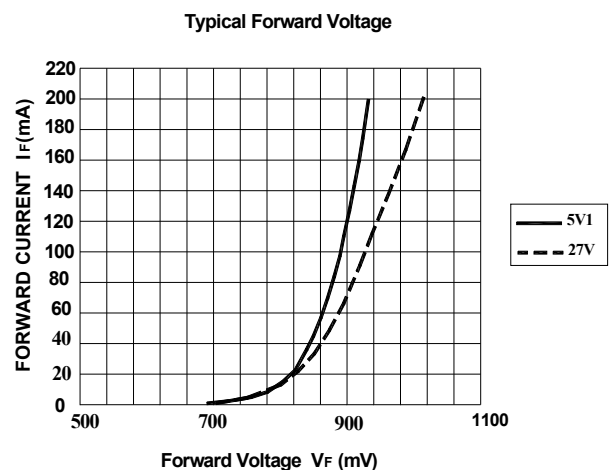
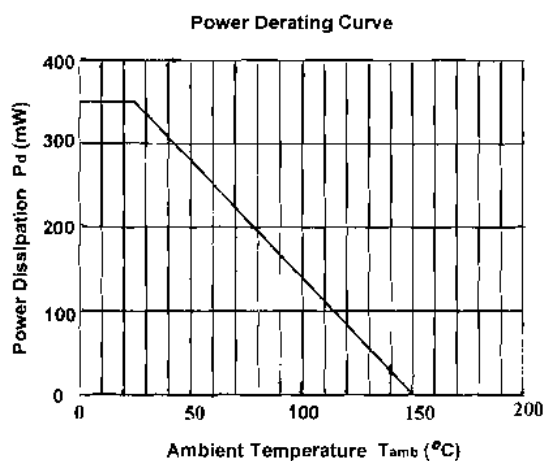
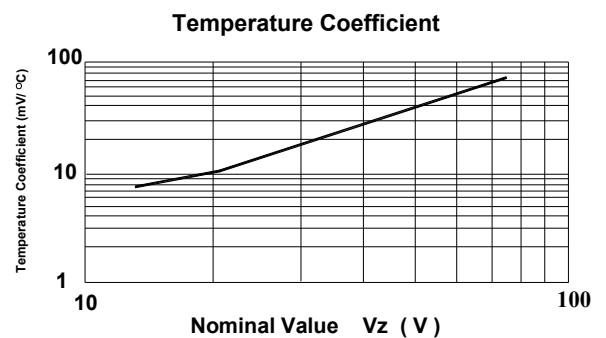
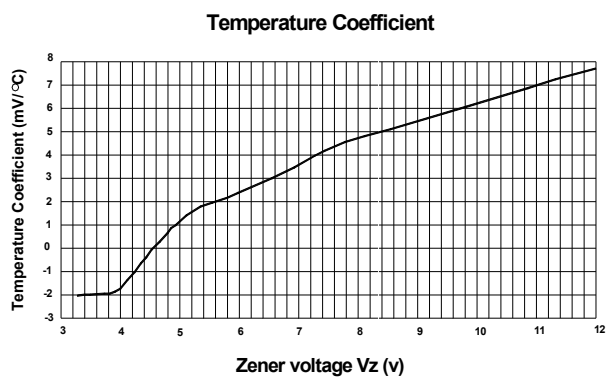


1. Anode 3. Cathode  
TO-236 Plastic Package

## Absolute Maximum Ratings ( $T_A = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Power Dissipation	$P_D$	350	mW
Thermal Resistance, Junction to Ambient <sup>1)</sup>	$R_{\theta JA}$	357	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature Range	$T_j, T_{stg}$	- 65 to + 150	$^\circ\text{C}$

<sup>1)</sup> Alumina = 0.4 X 0.3 X 0.024 in, 99.5% alumina



## Product Range

**Electrical Characteristics** ( $T_a = 25^\circ\text{C}$  unless otherwise noted,  $V_F < 0.9\text{ V}$  at  $I_F = 10\text{ mA}$ )

Type	Marking Code	Zener Voltage Range 1)				Dynamic Impedance		Reverse Current	
		$V_{ZT}$			at $I_{ZT}$	$Z_{ZT}$	at $I_{ZT}$	$I_R$	at $V_R$
		Nom. (V)	Min. (V)	Max. (V)	(mA)	Max. ( $\Omega$ )	(mA)	Max. ( $\mu\text{A}$ )	(V)
RND BZX84C2V4	C8	2.4	2.2	2.6	5	100	5	50	1
RND BZX84C2V7	D8	2.7	2.5	2.9	5	100	5	20	1
RND BZX84C3V0	E8	3	2.8	3.2	5	95	5	10	1
RND BZX84C3V3	F8	3.3	3.1	3.5	5	95	5	5	1
RND BZX84C3V6	H8	3.6	3.4	3.8	5	90	5	5	1
RND BZX84C3V9	J8	3.9	3.7	4.1	5	90	5	3	1
RND BZX84C4V3	K8	4.3	4	4.6	5	90	5	3	1
RND BZX84C4V7	M8	4.7	4.4	5	5	80	5	3	2
RND BZX84C5V1	N8	5.1	4.8	5.4	5	60	5	2	2
RND BZX84C5V6	P8	5.6	5.2	6	5	40	5	1	2
RND BZX84C6V2	R8	6.2	5.8	6.6	5	10	5	3	4
RND BZX84C6V8	X8	6.8	6.4	7.2	5	15	5	2	4
RND BZX84C7V5	Y8	7.5	7	7.9	5	15	5	1	5
RND BZX84C8V2	Z8	8.2	7.7	8.7	5	15	5	0.7	5
RND BZX84C9V1	A9	9.1	8.5	9.6	5	15	5	0.5	6
RND BZX84C10	B9	10	9.4	10.6	5	20	5	0.2	7
RND BZX84C11	C9	11	10.4	11.6	5	20	5	0.1	8
RND BZX84C12	D9	12	11.4	12.7	5	25	5	0.1	8
RND BZX84C13	E9	13	12.4	14.1	5	30	5	0.1	8
RND BZX84C15	F9	15	13.8	15.6	5	30	5	0.05	10.5
RND BZX84C16	H9	16	15.3	17.1	5	40	5	0.05	11.2
RND BZX84C18	J9	18	16.8	19.1	5	45	5	0.05	12.6
RND BZX84C20	K9	20	18.8	21.2	5	55	5	0.05	14
RND BZX84C22	M9	22	20.8	23.3	5	55	5	0.05	15.4
RND BZX84C24	N9	24	22.8	25.6	5	70	5	0.05	16.8
RND BZX84C27	P9	27	25.1	28.9	2	80	2	0.05	18.9
RND BZX84C30	R9	30	28	32	2	80	2	0.05	21
RND BZX84C33	X9	33	31	35	2	80	2	0.05	23.1
RND BZX84C36	Y9	36	34	38	2	90	2	0.05	25.2
RND BZX84C39	Z9	39	37	41	2	130	2	0.05	27.3
RND BZX84C43	A0	43	40	46	2	150	2	0.05	30.1
RND BZX84C47	B0	47	44	50	2	170	2	0.05	32.9

<sup>1)</sup> Tested with pulses  $t_p = 20\text{ ms}$ .

**Electrical Characteristics** (  $T_a = 25^\circ\text{C}$  unless otherwise noted,  $V_F < 0.9\text{ V}$  at  $I_F = 10\text{ mA}$ )

Type	Marking Code	Zener Voltage Range 1)				Dynamic Impedance		Reverse Current	
		$V_{ZT}$			at $I_{ZT}$	$Z_{ZT}$	at $I_{ZT}$	$I_R$	at $V_R$
		Nom. (V)	Min. (V)	Max. (V)	(mA)	Max. ( $\Omega$ )	(mA)	Max. ( $\mu\text{A}$ )	(V)
RND BZX84B10	DP	10	9.8	10.2	5	20	5	0.2	7
RND BZX84B12	DX	12	11.8	12.2	5	25	5	0.1	8
RND BZX84B16	EA	16	15.7	16.3	5	40	5	0.05	11.2
RND BZX84B18	EB	18	17.6	18.4	5	45	5	0.05	12.6
RND BZX84B22	ED	22	21.6	22.4	5	55	5	0.05	15.4
RND BZX84B4V7	DD	4.7	4.61	4.79	5	80	5	3	2
RND BZX84B5V1	DE	5.1	5.0	5.2	5	60	5	2	2
RND BZX84B5V6	DF	5.6	5.49	5.71	5	40	5	1	2
RND BZX84B6V2	DH	6.2	6.08	6.32	5	10	5	3	4
RND BZX84B6V8	DJ	6.8	6.66	6.94	5	15	5	2	4
RND BZX84B7V5	DK	7.5	7.35	7.65	5	15	5	1	5
RND BZX84B8V2	DM	8.2	8.04	8.36	5	15	5	0.7	5
RND BZX84B9V1	DN	9.1	8.92	9.28	5	15	5	0.5	6

<sup>1)</sup> Tested with pulses  $t_p = 20\text{ ms}$ .