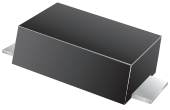


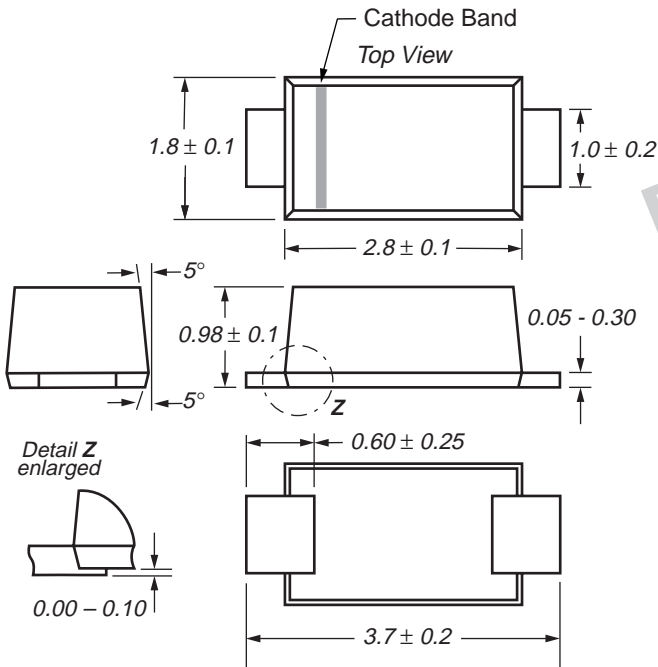


### Zener Diodes

V<sub>z</sub> Range 3.6 to 91V  
Power Dissipation 800mW



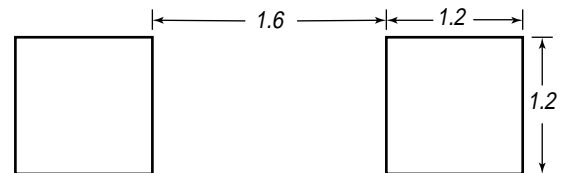
DO-219AB (SMF)



Dimensions in millimeters

Patented

Mounting Pad Layout



### Mechanical Data

**Case:** JEDEC DO-219 Plastic Case

**Weight:** approx. 0.01g

**Packaging codes/options:**

D3/10K per 13" reel (8mm tape), 30K/box

D4/3K per 7" reel (8mm tape), 30K/box

### Features

- Silicon Planar Power Zener Diodes.
- Low profile surface-mount package.

### Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Zener Current (see Table "Characteristics")			
Power Dissipation at T <sub>A</sub> = 25°C	P <sub>tot</sub>	800 <sup>(1)</sup>	mW
Thermal Resistance Junction to Ambient Air	R <sub>θJA</sub>	188 <sup>(1)</sup>	°C/W
Maximum Junction Temperature	T <sub>j</sub>	175	°C
Storage Temperature Range	T <sub>S</sub>	-65 to +175	°C

**Note:** (1) FR-4 or FR-5 board with 3 x 3mm solder pad layout

# GZF3V6C thru GZF91C



Vishay Semiconductors  
formerly General Semiconductor

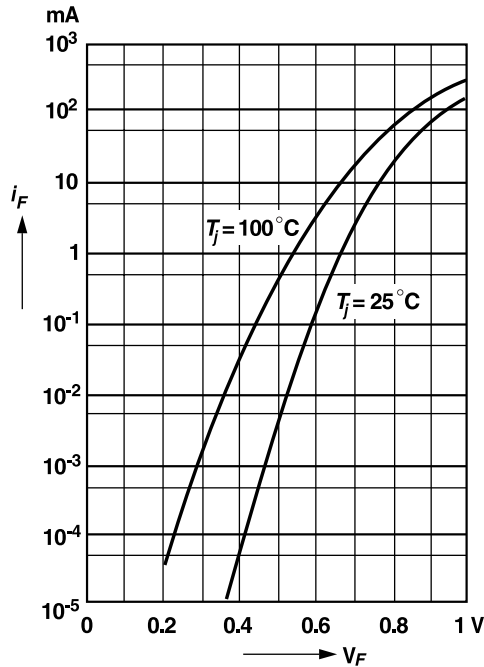
## Electrical Characteristics (T<sub>A</sub> = 25°C unless otherwise noted) Maximum V<sub>F</sub> = 1.2 V at I<sub>F</sub> = 200mA

Type	Marking Code	Zener Voltage			Differential Resistance		Temperature Coefficient		Test Current	Reverse Current at Reverse Voltage	
		Min.	V <sub>Z</sub> (V) @ I <sub>Z</sub> Nom.	Max.	r <sub>dif</sub> (Ω) @ I <sub>Z</sub> Typ.	Max.	α <sub>Z</sub> @ I <sub>Z</sub> (%/°C)			I <sub>ZT</sub> (mA)	I <sub>R</sub> (μA) Max
							Min.	Max.			
GZF3V6C	W5	3.4	3.6	3.8	4	8	-0.14	-0.04	100	100	1
GZF3V9C	W6	3.7	3.9	4.1	4	8	-0.14	-0.04	100	50	1
GZF4V3C	W7	4.0	4.3	4.6	4	7	-0.12	-0.02	100	25	1
GZF4V7C	W8	4.4	4.7	5.0	3	7	-0.10	0.00	100	10	1
GZF5V1C	W9	4.8	5.1	5.4	3	6	-0.08	-0.20	100	5	1
GZF5V6C	WA	5.2	5.6	6.0	2	4	-0.04	0.04	100	10	2
GZF6V2C	WB	5.8	6.2	6.6	2	3	-0.01	0.06	100	5	2
GZF6V8C	WC	6.4	6.8	7.2	1	3	0.00	0.07	100	10	3
GZF7V5C	WD	7.0	7.5	7.9	1	2	0.00	0.07	100	50	3
GZF8V2C	WE	7.7	8.2	8.7	1	2	0.03	0.08	100	10	3
GZF9V1C	WF	8.5	9.1	9.6	2	4	0.03	0.08	50	10	5
GZF10C	WG	9.4	10	10.6	2	4	0.05	0.09	50	7	7.5
GZF11C	WH	10.4	11	11.6	4	7	0.05	0.10	50	4	8.2
GZF12C	WI	11.4	12	12.7	4	7	0.05	0.10	50	3	9.1
GZF13C	WK	12.4	13	14.1	5	10	0.05	0.10	50	2	10
GZF15C	WL	13.8	15	15.6	5	10	0.05	0.10	50	1	11
GZF16C	WM	15.3	16	17.1	6	15	0.06	0.11	25	1	12
GZF18C	WN	16.8	18	19.1	6	15	0.06	0.11	25	1	13
GZF20C	WO	18.8	20	21.2	6	15	0.06	0.11	25	1	15
GZF22C	WP	20.8	22	23.3	6	15	0.06	0.11	25	1	16
GZF24C	WR	22.8	24	25.6	7	15	0.06	0.11	25	1	18
GZF27C	WS	25.1	27	28.9	7	15	0.06	0.11	25	1	20
GZF30C	WT	28	30	32	8	15	0.06	0.11	25	1	22
GZF33C	WU	31	33	35	8	15	0.06	0.11	25	1	24
GZF36C	WW	34	36	38	21	40	0.06	0.11	10	1	27
GZF39C	WX	37	39	41	21	40	0.06	0.11	10	1	30
GZF43C	WY	40	43	46	24	45	0.07	0.12	10	1	33
GZF47C	WZ	44	47	50	24	45	0.07	0.12	10	1	36
GZF51C	X1	48	51	54	25	60	0.07	0.12	10	1	39
GZF56C	X2	52	56	60	25	60	0.07	0.12	10	1	43
GZF62C	X3	58	62	66	25	80	0.08	0.13	10	1	47
GZF68C	X4	64	68	72	25	80	0.08	0.13	10	1	51
GZF75C	X5	70	75	79	30	100	0.08	0.13	10	1	56
GZF82C	X6	77	82	87	30	100	0.08	0.13	10	1	62
GZF91C	X7	85	91	96	60	200	0.09	0.13	5	1	68



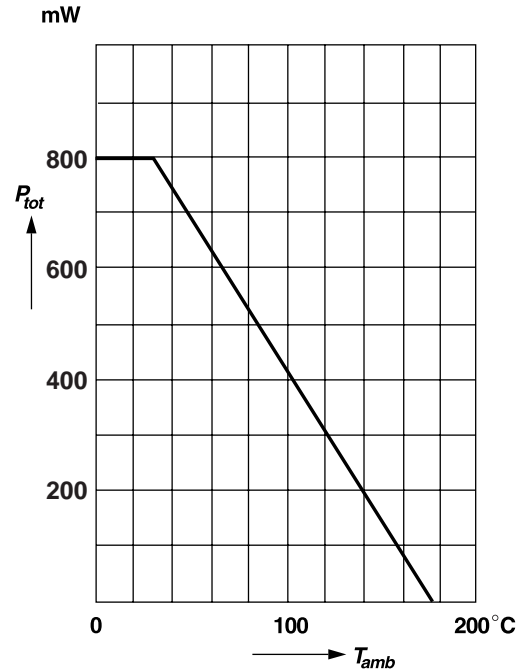
## Ratings and Characteristic Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

### Forward characteristics



### Admissible power dissipation versus ambient temperature

For conditions, see footnote in table "Absolute Maximum Ratings"



### Capacitance versus Zener voltage

