



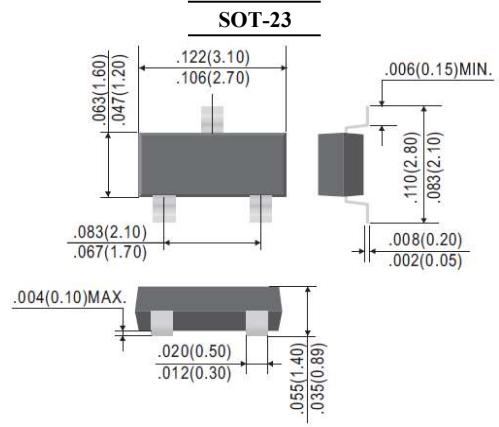
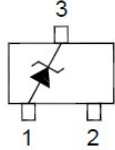
BZX84C2V4 THRU BZX84C51V

SILICON ZENER DIODES

REVERSE VOLTAGE: 2.4 TO 51 VOLTS
POWER DISSIPATION: 300 mWATTS

FEATURES

- Zener breakdown voltage range 2.4V to 51V
- Package designed for optimal automated board assembly
- Small package size for high density applications
- Suffix "H" indicates Halogen-free parts, ex. BZX84C2V4H



Dimensions in inches and (millimeters)

Absolute Maximum Ratings

Tamb = 25 °C, unless otherwise specified

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	300	mW
Maximum Forward Voltage at $I_F=10mA$	V_F	0.9	V
Thermal Resistance, Junction to Ambient ¹⁾	$R_{\theta JA}$	417	°C/W
Storage Temperature Range	T_{stg}	-65 to +150	°C

¹⁾Alumina=0.4×0.3×0.024in, 99.5% alumina



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Electrical Characteristics

Tamb = 25 °C, unless otherwise specified

Type	Zener Voltage Range ¹⁾			Dynamic Impedance		Reverse Current		
	V _{ZT}			at I _{ZT}	Z _{ZT}	at I _{ZT}	I _R	at V _R
	Min. (V)	Nom. (V)	Max. (V)	(mA)	MAX. (Ω)	(mA)	MAX. (μA)	V
BZX84C2V4	2.20	2.4	2.60	5	100	5	50.0	1.0
BZX84C2V7	2.50	2.7	2.90	5	100	5	20.0	1.0
BZX84C3V0	2.80	3.0	3.20	5	95	5	10.0	1.0
BZX84C3V3	3.10	3.3	3.50	5	95	5	5.0	1.0
BZX84C3V6	3.40	3.6	3.80	5	90	5	5.0	1.0
BZX84C3V9	3.70	3.9	4.10	5	90	5	3.0	1.0
BZX84C4V3	4.00	4.3	4.60	5	90	5	3.0	1.0
BZX84C4V7	4.40	4.7	5.00	5	80	5	3.0	2.0
BZX84C5V1	4.80	5.1	5.40	5	60	5	2.0	2.0
BZX84C5V6	5.20	5.6	6.00	5	40	5	1.0	2.0
BZX84C6V2	5.80	6.2	6.60	5	10	5	3.0	4.0
BZX84C6V8	6.40	6.8	7.20	5	15	5	2.0	4.0
BZX84C7V5	7.00	7.5	7.90	5	15	5	1.0	5.0
BZX84C8V2	7.70	8.2	8.70	5	15	5	0.7	5.0
BZX84C9V1	8.50	9.1	9.60	5	15	5	0.5	6.0
BZX84C10	9.40	10.0	10.60	5	20	5	0.2	7.0
BZX84C11	10.40	11.0	11.60	5	20	5	0.1	8.0
BZX84C12	11.40	12.0	12.70	5	25	5	0.1	8.0
BZX84C13	12.40	13.0	14.10	5	30	5	0.1	8.0
BZX84C15	13.80	15.0	15.60	5	30	5	0.05	10.5
BZX84C16	15.30	16.0	17.10	5	40	5	0.05	11.2
BZX84C18	16.80	18.0	19.10	5	45	5	0.05	12.6
BZX84C20	18.80	20.0	21.20	5	55	5	0.05	14.0
BZX84C22	20.80	22.0	23.30	5	55	5	0.05	15.4
BZX84C24	22.80	24.0	25.60	5	70	5	0.05	16.8
BZX84C27	25.10	27.0	28.90	2	80	2	0.05	18.9
BZX84C30	28.00	30.0	32.00	2	80	2	0.05	21.0
BZX84C33	31.00	33.0	35.00	2	80	2	0.05	23.1
BZX84C36	34.00	36.0	38.00	2	90	2	0.05	25.2
BZX84C39	37.00	39.0	41.00	2	130	2	0.05	27.3
BZX84C43	40.00	43.0	46.00	2	150	2	0.05	30.1
BZX84C47	44.00	47.0	50.00	2	170	2	0.05	32.9
BZX84C51	48.00	51.0	54.00	2	180	2	0.05	35.7

¹⁾Tested with pulses tp=20ms

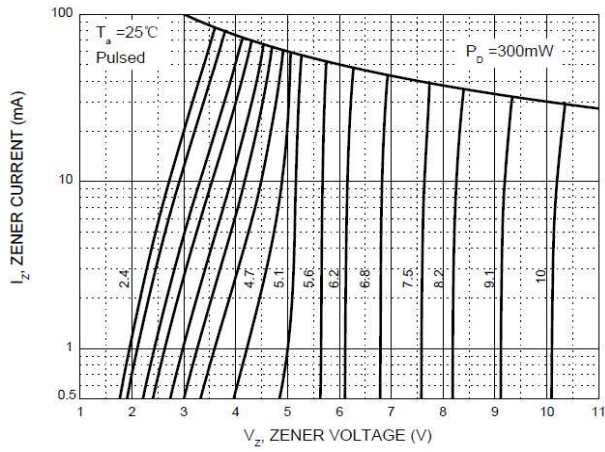


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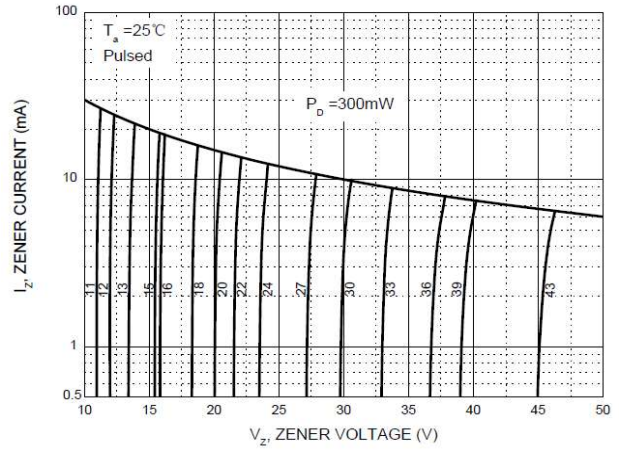
SILICON ZENER DIODES

RATINGS AND CHARACTERISTIC CURVES

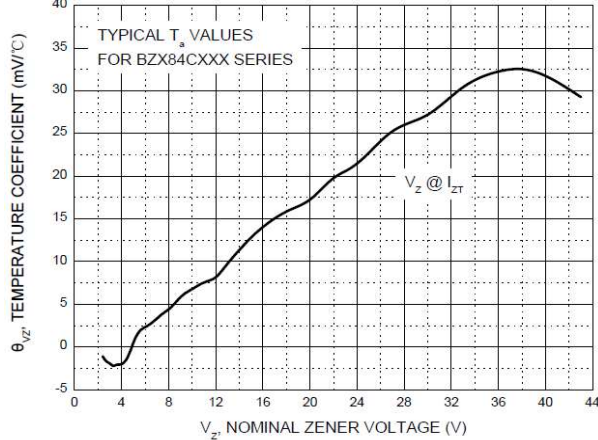
Zener Characteristics (V_z Up to 10 V)



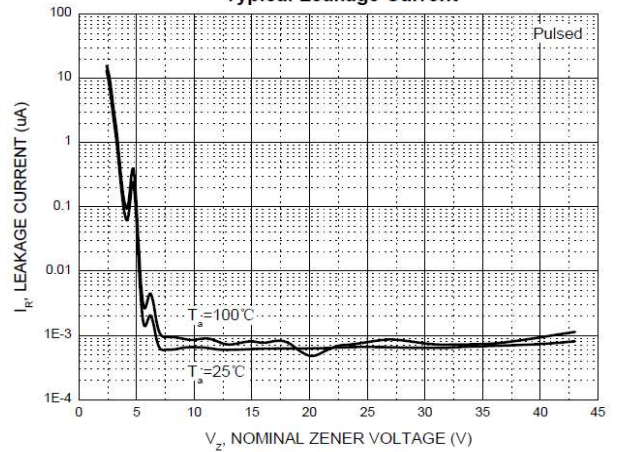
Zener Characteristics (11 V to 43 V)



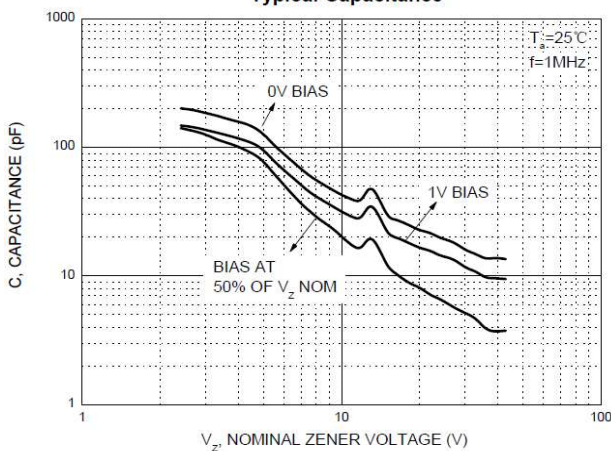
Temperature Coefficients



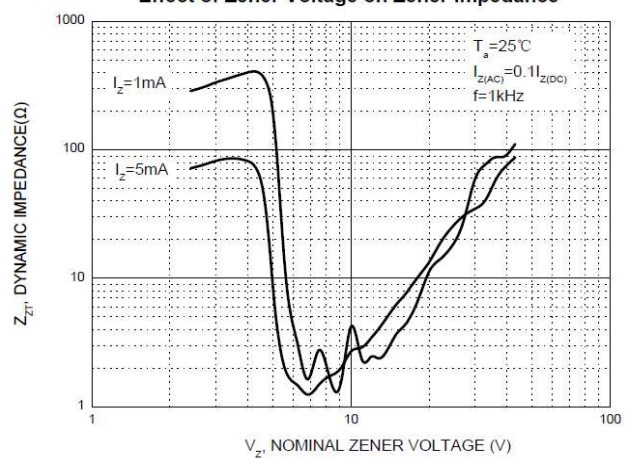
Typical Leakage Current



Typical Capacitance



Effect of Zener Voltage on Zener Impedance





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SILICON ZENER DIODES

