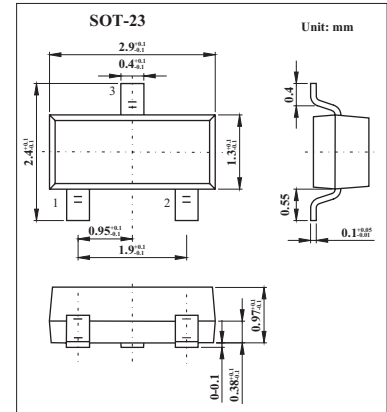


## 350mW Surface Mount Zener Diodes

### BZX84C9V1

#### ■ Features

- Planar Die Construction
- 350mW Power Dissipation
- Ideally Suited for Automated Assembly Processes



#### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Forward Voltage at If = 10 mA	V <sub>F</sub>	0.9	V
Power Dissipation *	P <sub>D</sub>	350	mW
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>s</sub>	-65 to + 150	°C
Thermal Resistance Junction to Ambient Air *	R <sub>thA</sub>	417	°C/W

\*Device mounted on FR-4 PC board with recommended pad layout,

#### ■ Electrical Characteristics Ta = 25°C (unless otherwise noted)

Type Number	Zener Voltage Range *1			Maximum Zener Impedance *2			Maximum Reverse Current *1		Typical Temperature Coefficient @ I <sub>ZT</sub> mV/°C		
	V <sub>Z</sub> @ I <sub>ZT</sub>			Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @ I <sub>ZK</sub>		I <sub>R</sub>	V <sub>R</sub>	Min	Max	
	Nom (V)	Min (V)	Max (V)	mA	Ω	Ω	mA	μA			V
BZX84C9V1	9.1	8.5	9.6	5.0	15	100	1.0	0.5	6	3.8	7

\*1. Short duration test pulse used to minimize self-heating effect.

\*2. f = 1KHz.

#### ■ Marking

Marking	Z8
---------	----

### BZX84C9V1

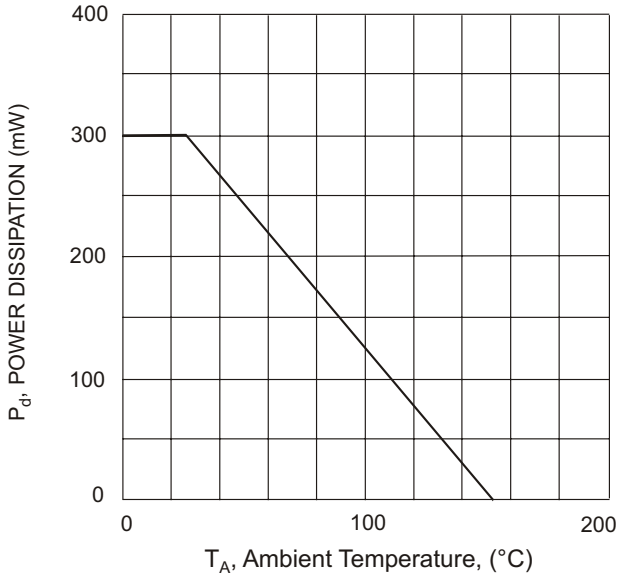


Fig. 1 Power Derating Curve

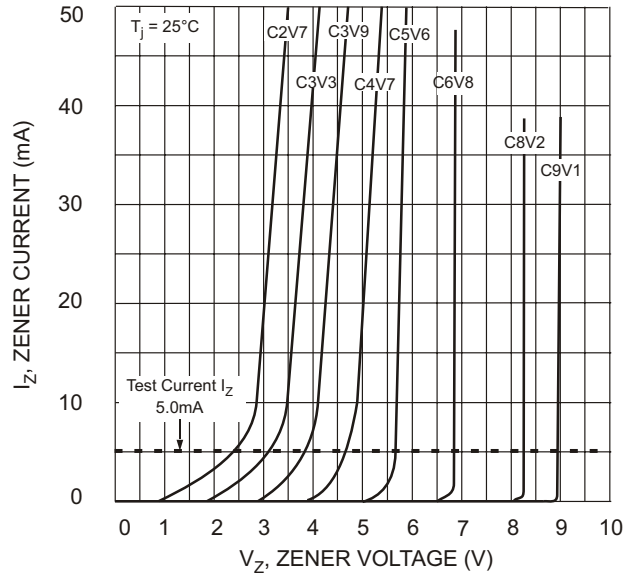


Fig. 2 Zener Breakdown Characteristics

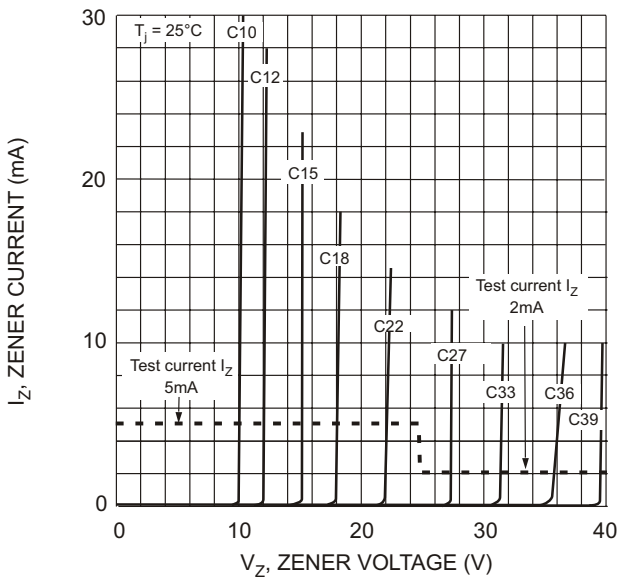


Fig. 3 Zener Breakdown Characteristics

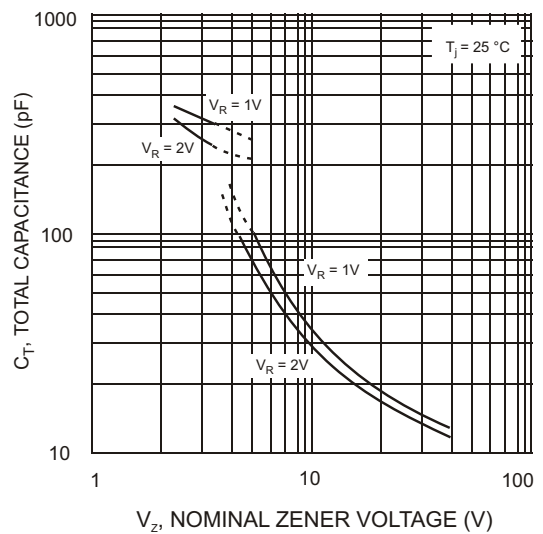


Fig. 4 Total Capacitance vs Nominal Zener Voltage