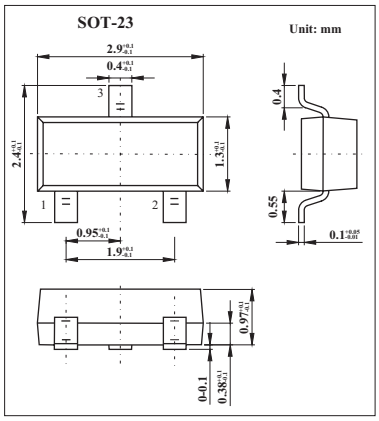
350mW Surface Mount Zener Diodes
BZX84C3V9



Features

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

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Forward Voltage at I_F = 10 mA	V_F	0.9	V
Power Dissipation *	P_D	350	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_S	-65 to + 150	℃
Thermal Resistance Junction to Ambient Air *	R_{thA}	417	℃/W

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

Electrical Characteristics Ta = 25℃(unless otherwise noted)

Type Number	Zener Voltage Range *1				Maximum Zener Impedance *2			Maximum Reverse Current *1		Typical Temperature Coefficient @ I_{ZT} mV/℃	
	V_Z @ I_{ZT}			I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}		I_R	V_R	Min	Max
	Nom (V)	Min (V)	Max (V)	mA	Ω	Ω	mA	μA	V		
BZX84C3V9	3.9	3.7	4.1	5.0	90	600	1.0	3	1	-3.5	0

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

*2. f = 1KHz.

Marking

Marking	Z16

BZX84C3V9

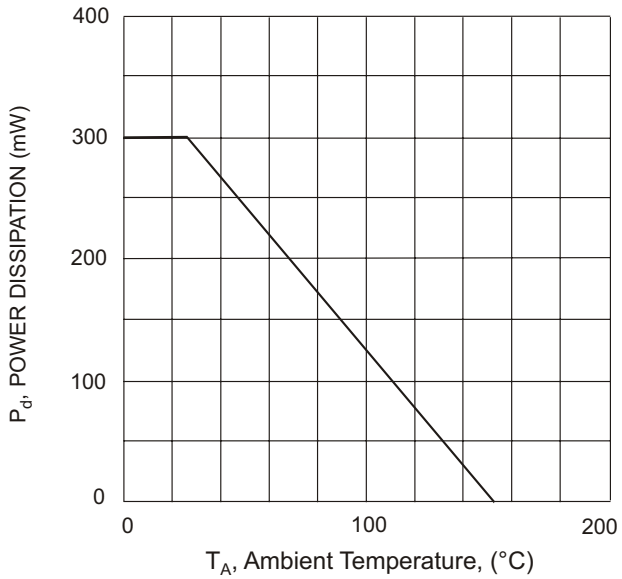


Fig. 1 Power Derating Curve

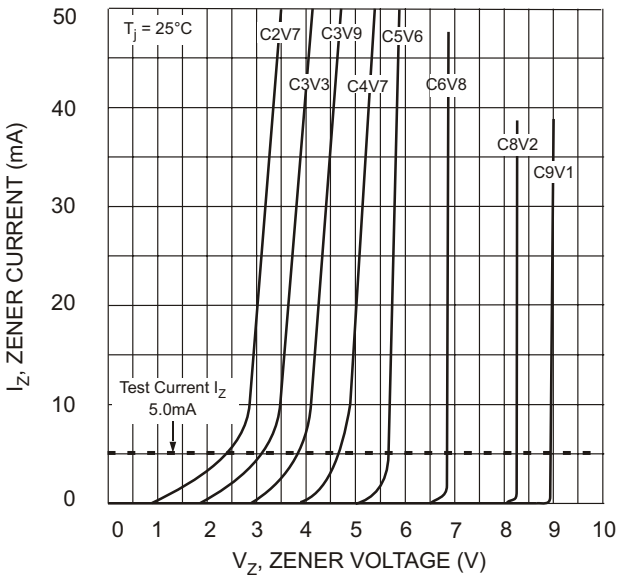


Fig. 2 Zener Breakdown Characteristics

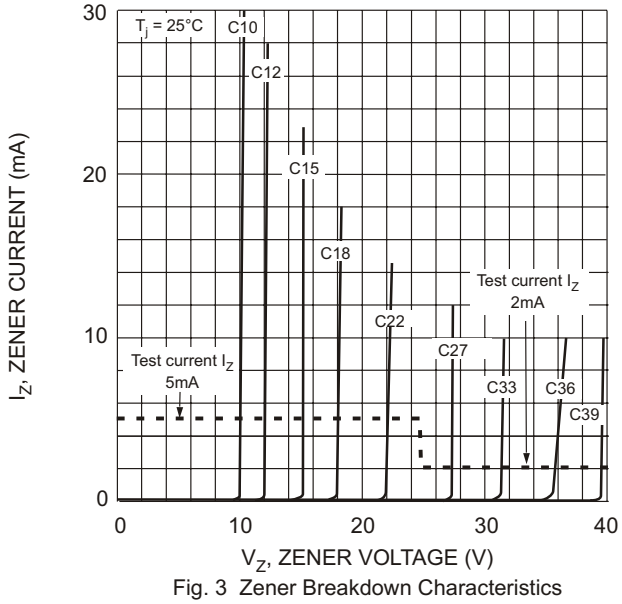


Fig. 3 Zener Breakdown Characteristics

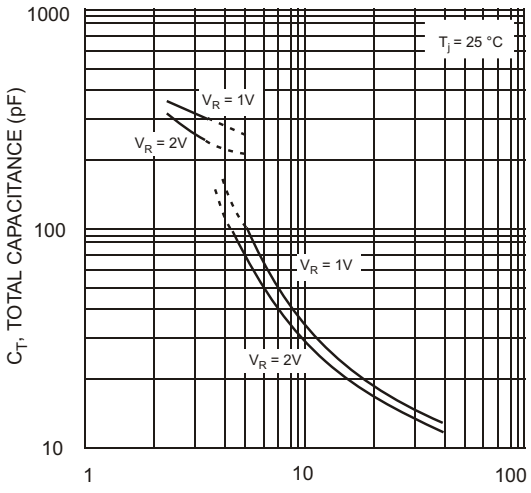


Fig. 4 Total Capacitance vs Nominal Zener Voltage