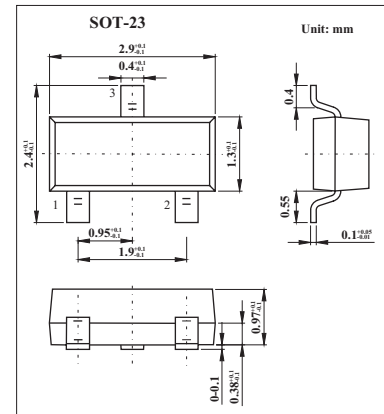


350mW Surface Mount Zener Diodes

BZX84C12

■ Features

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



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

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

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

■ Electrical Characteristics $T_a = 25^\circ\text{C}$ (unless otherwise noted)

Type Number	Zener Voltage Range *1				Maximum Zener Impedance *2			Maximum Reverse Current *1		Typical Temperature Coefficient @ I_{zT} mV/ $^\circ\text{C}$	
	$V_z @ I_{zT}$			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		
BZX84C12	12	11.4	12.7	5.0	25	150	1.0	0.1	8	6	10

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

*2. $f = 1\text{ kHz}$.

■ Marking

Marking	Y2
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BZX84C12

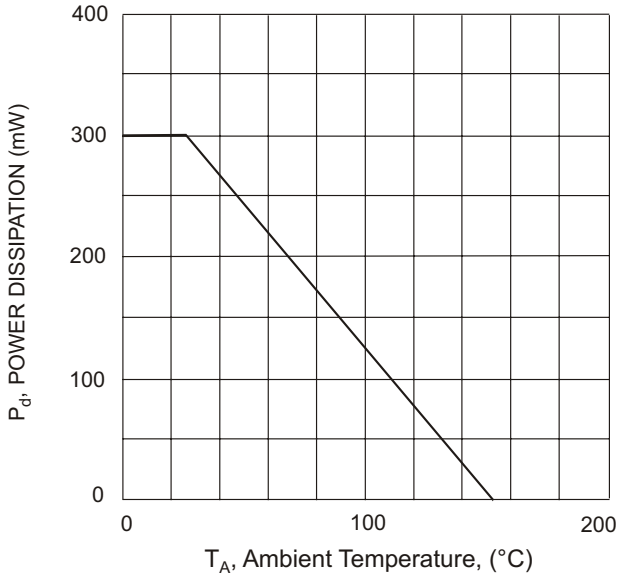


Fig. 1 Power Derating Curve

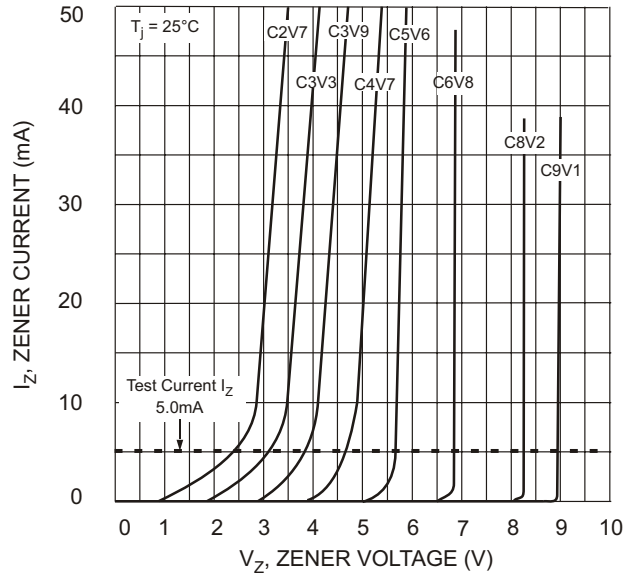


Fig. 2 Zener Breakdown Characteristics

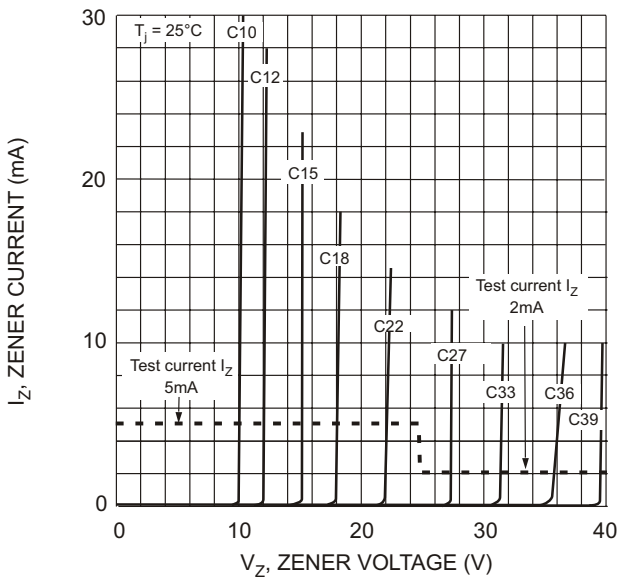


Fig. 3 Zener Breakdown Characteristics

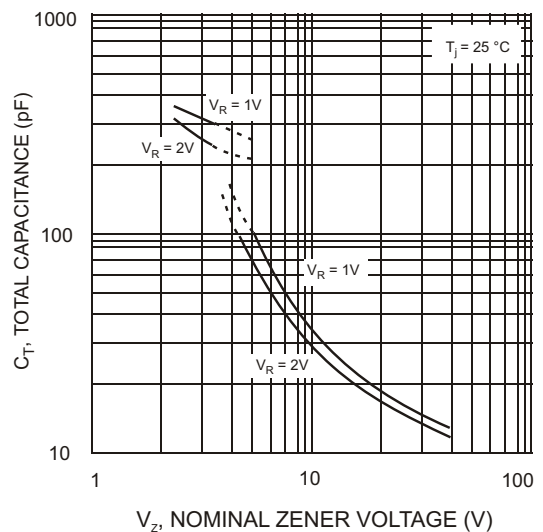


Fig. 4 Total Capacitance vs Nominal Zener Voltage