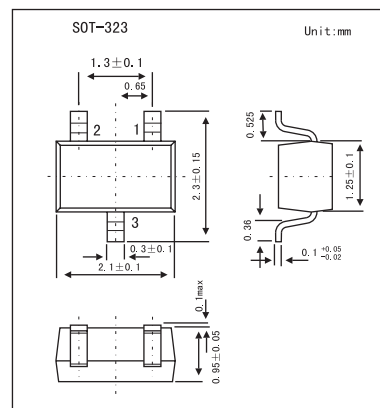
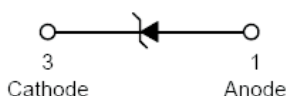


200mW Surface Mount Zener Diode BZX84C39W

Features

- Planar Die Construction
- 200mW Power Dissipation
- Ultra-Small Surface Mount Package



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

Parameter	Symbol	Rating	Unit
Forward Voltage @ $I_F = 10\text{mA}$	V_F	0.9	V
Power Dissipation	P_D	200	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	625	K/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150	$^\circ\text{C}$

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Type Number	Zener Voltage Range *1				Maximum Zener Impedance*2			Maximum Reverse Current *1		Temperature Coefficient of Zener Voltage @ $I_{ZT} = 5\text{mA}$ (mV/ $^\circ\text{C}$)	
	$V_Z @ I_{ZT}$			I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	I_{ZK}	I_R	@ V_R		
	Nom (V)	Min (V)	Max (V)	mA	Ω		mA	μA	V	Min	Max
BZX84C39W	39	37	41	2	130	350	0.5	0.1	27.3	33.4	41.2

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

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

Marking

Marking	KPE
---------	-----

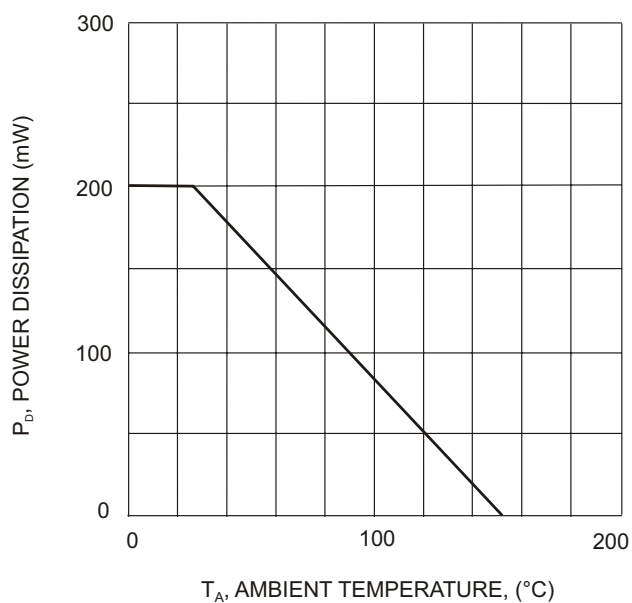
BZX84C39W

Fig. 1. Power Derating Curve

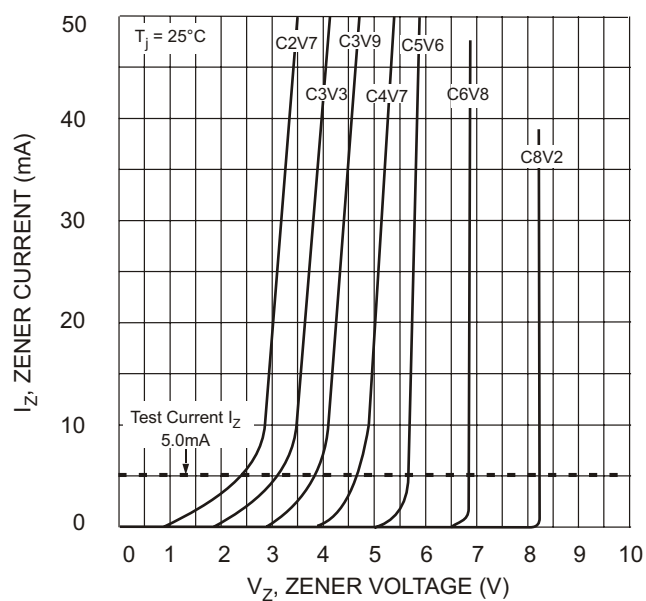


Fig. 2 Zener Breakdown Characteristics

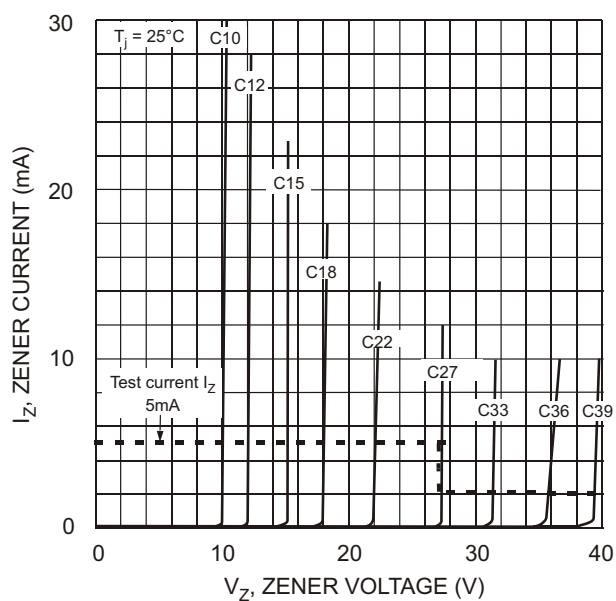


Fig. 3. Zener Breakdown Characteristics

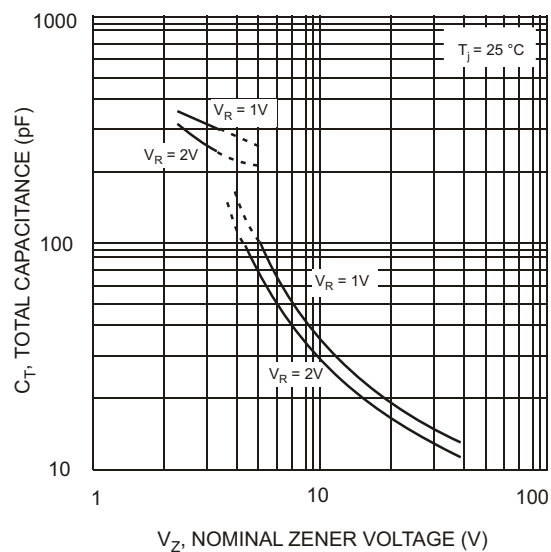


Fig. 4. Total Capacitance vs Nominal Zener Voltage