Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	Value	Unit
Forward Voltage (Note 5) @ I_F = 10mA	V_F	0.9	V

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation	P_D	200	mW
Thermal Resistance, Junction to Ambient Air (Note 7)	$R_{\theta JA}$	625	°C/W
Operating and Storage Temperature Range (Note 7)	T_J, T_{STG}	-65 to +150	°C

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

Type Number	Marking Code	Zener Voltage Range (Note 5)			Maximum Zener Impedance (Note 6)				Maximum Reverse Current (Note 5)		Temperature Coefficient of Zener Voltage @ I_{ZT} = 5mA	
		$V_{Z\ @}\ I_{ZT}$ = 5.0mA			Z_{ZT} @ I_{ZT}		Z_{ZK} @ I_{ZK}		I_R @ V_R		T_C (mV/°C)	
		Nom (V)	Min (V)	Max (V)	Ω	mA	Ω	mA	µA	V	Min	Max
QZX363C5V6	K5F	5.6	5.32	5.88	40	5.0	400	1.0	1.0	2.0	-2.0	2.5
QZX363C6V8	K6F	6.8	6.47	7.14	15	5.0	80	1.0	2.0	4.0	1.2	4.5
QZX363C15	KJF	15	13.8	15.6	30	5.0	200	1.0	0.1	10.5	9.2	13.0
QZX363C20	KMF	20	19.0	21.0	55	5.0	225	1.0	0.1	14	14.4	18.0

Notes: 5. Short duration pulse test used to minimize self-heating effect.
6. f = 1kHz.
7. Device mounted on FR-4 PC board with recommended pad layout, which can be found on our website at http://www.diodes.com/package-outlines.html.

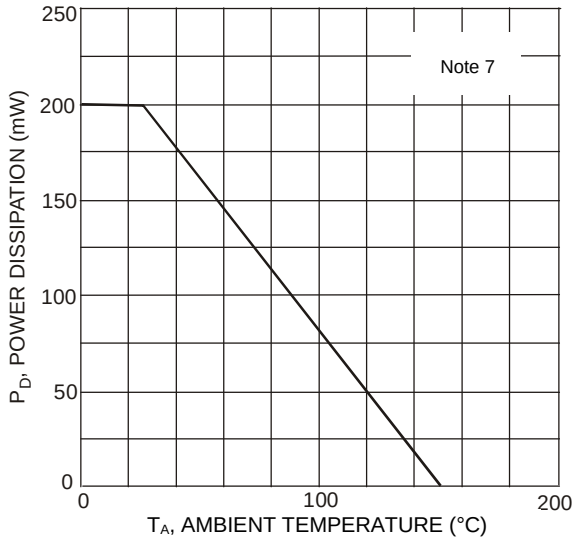


Fig. 1 Power Derating Curve

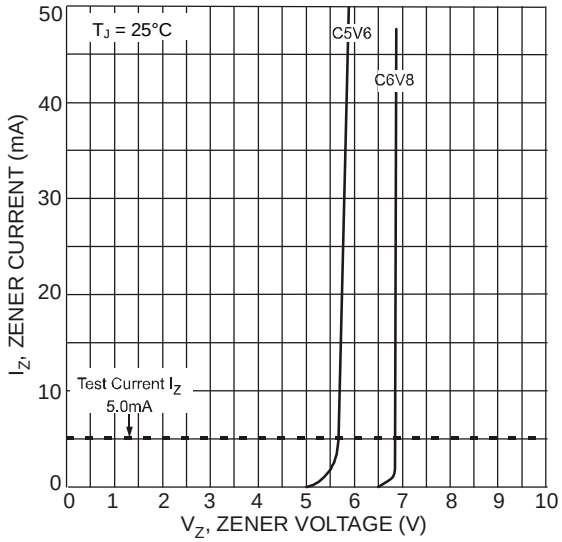


Fig. 2 Typical Zener Breakdown Characteristics

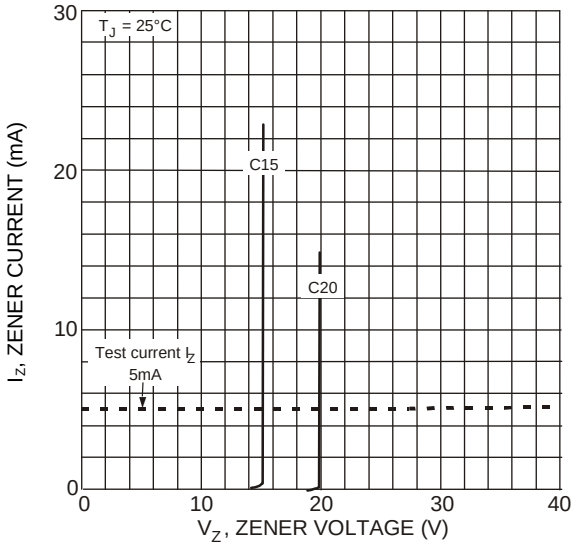


Fig. 3 Typical Zener Breakdown Characteristics

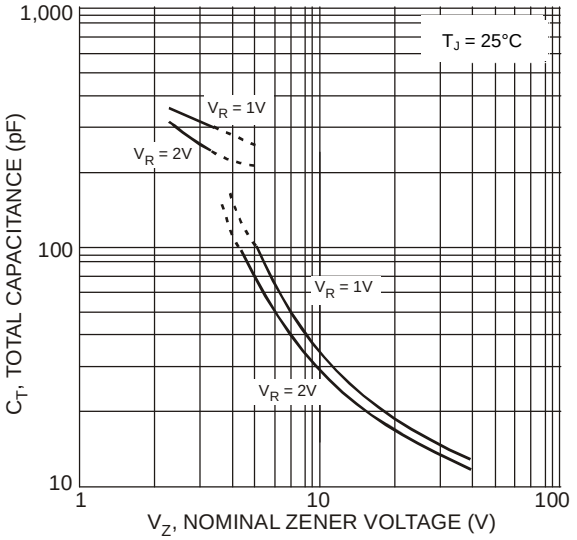
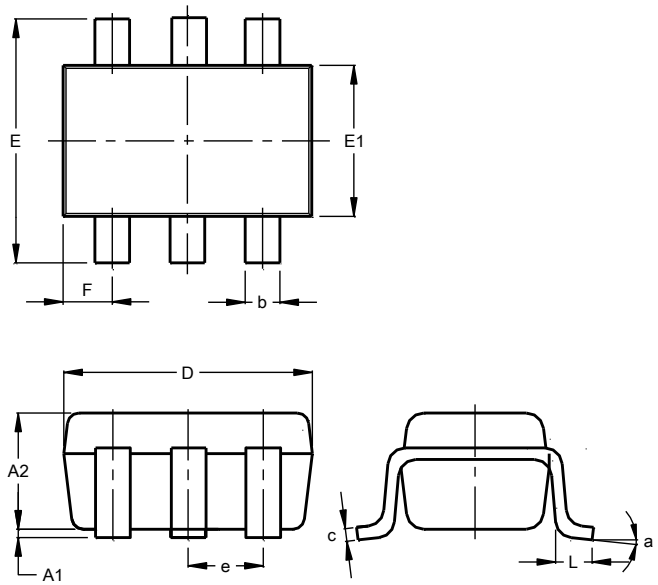


Fig. 4 Typical Total Capacitance vs. Nominal Zener Voltage

Package Outline Dimensions

Please see http://www.diodes.com/package-outlines.html for the latest version.

SOT363

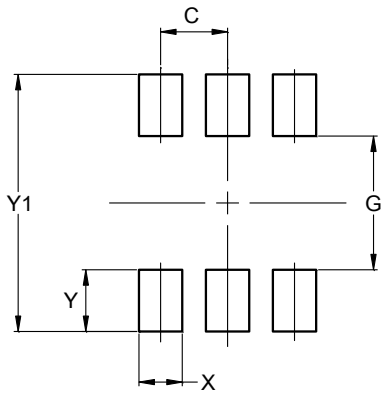


SOT363			
Dim	**Min**	**Max**	**Typ**
A1	0.00	0.10	0.05
A2	0.90	1.00	0.95
b	0.10	0.30	0.25
c	0.10	0.22	0.11
D	1.80	2.20	2.15
E	2.00	2.20	2.10
E1	1.15	1.35	1.30
e	0.650 BSC		
F	0.40	0.45	0.425
L	0.25	0.40	0.30
a	0°	8°	--
All Dimensions in mm			

Suggested Pad Layout

Please see http://www.diodes.com/package-outlines.html for the latest version.

SOT363



Dimensions	Value (in mm)
C	0.650
G	1.300
X	0.420
Y	0.600
Y1	2.500

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