

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

Characteristic	Symbol	Value	Unit
Forward Voltage @ I _F = 10mA	V _F	0.9	V

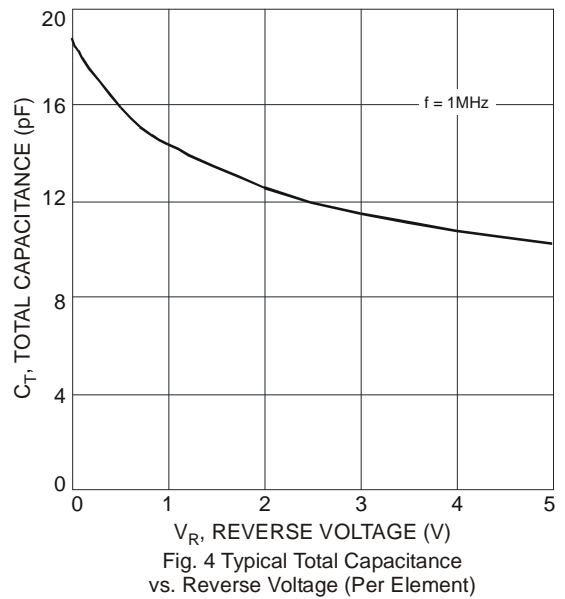
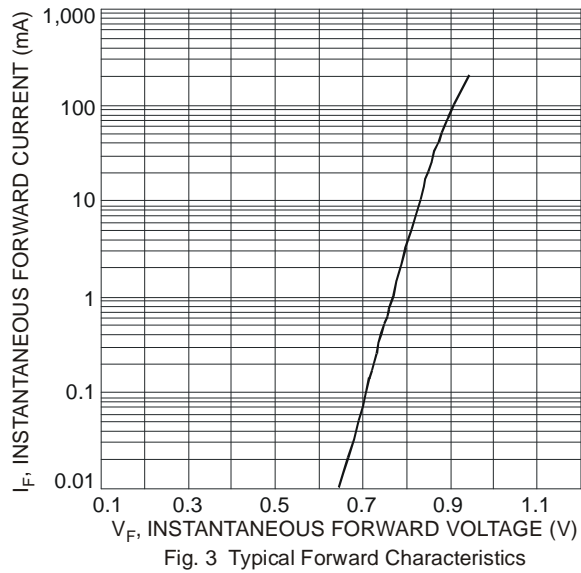
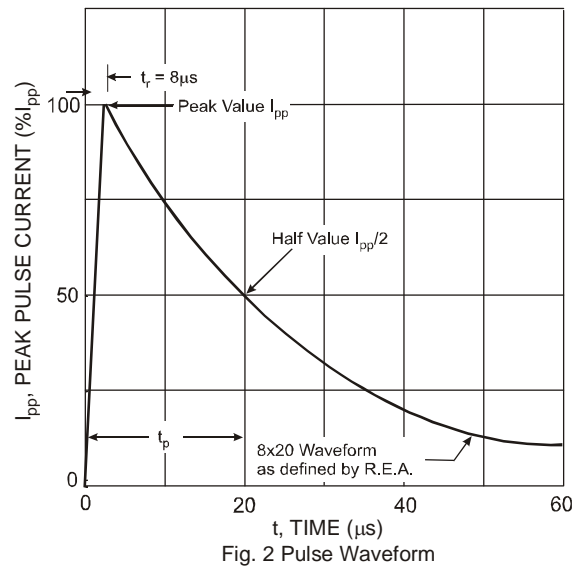
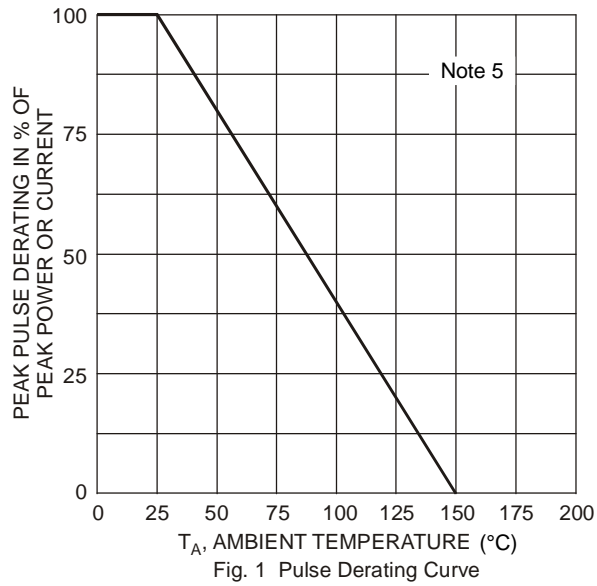
Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Notes 5 & 6)	P _D	380	mW
Peak Power Dissipation, 8x20μS Waveform (Note 7)	P _{PK}	20	W
Thermal Resistance, Junction to Ambient (Note 5)	R _{θJA}	327	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

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

Type Number	Marking Code	Breakdown Voltage (Note 8)			Leakage Current (Note 8)		Max. Clamping Voltage (Note 7)		Capacitance @ 0V Bias (pF) (Note 9)		Capacitance @ 3V Bias (pF) (Note 9)	
		V _{BR} @ I _T = 1mA			I _{RM} @ V _{RM}		V _C @ I _{PP}		C _T		C _T	
		Min (V)	Nom (V)	Max (V)	Max (μA)	(V)	V _C (V)	I _{PP} (A)	Typ	Max	Typ	Max
DZQA5V6AXV5	T56	5.3	5.6	5.9	1	3.0	13	1.6	18.7	20	11.4	12.3

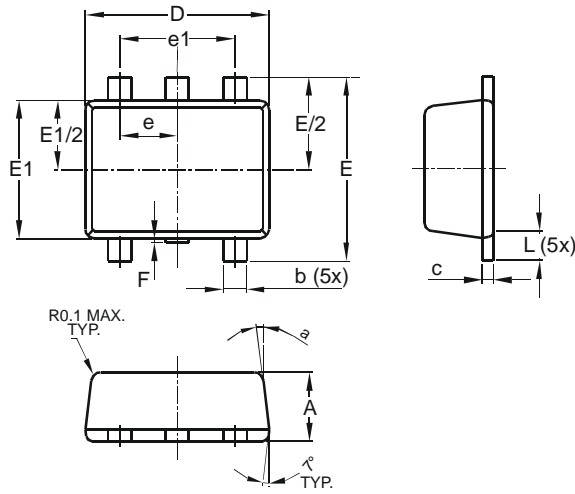
- Notes:
- Device mounted on FR-4 PCB, 1 inch x 0.85 inch x 0.062 inch; pad layout as shown on Diodes Incorporated's Suggested Pad Layout document, which can be found on our website at <http://www.diodes.com>.
 - Only 1 diode under power. For all 4 diodes under power, P_D will be 25% of the listed value.
 - Non-repetitive current pulse per Figure 2 and derate above T_A = +25°C per Figure 1.
 - Short duration pulse test used to minimize self-heating effect.
 - Per element, f = 1MHz, T_A = +25°C



Package Outline Dimensions

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

SOT553

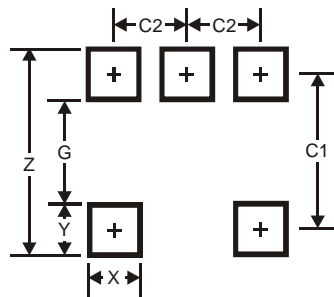


SOT553			
Dim	Min	Max	Typ
A	0.55	0.62	0.60
b	0.15	0.30	0.20
c	0.10	0.18	0.15
D	1.50	1.70	1.60
E	1.55	1.70	1.60
E1	1.10	1.25	1.20
e	0.50 BSC		
e1	1.00 BSC		
F	0.00	0.10	—
L	0.10	0.30	0.20
a	6°	8°	7°
All Dimensions in mm			

Suggested Pad Layout

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

SOT553



Dimensions	Value (in mm)
Z	2.2
G	1.2
X	0.375
Y	0.5
C1	1.7
C2	0.5

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