

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

Features

- Fast Switching Speed
- Ultra-Small Surface Mount Package (1.0 x 0.8mm)
- Ultra-Low Profile Package (0.45mm)
- Low Forward Voltage: typ of 0.62V at $I_F = 1.0\text{mA}$
- Fast Reverse Recovery: max of 4.0ns
- Low Capacitance: max of 3.0pF
- Low Reverse Leakage Current
- Ideal for Battery Powered Portable Applications
- **Lead Free By Design/RoHS Compliant (Note 1)**
- **Halogen and Antimony Free "Green" Device (Notes 2 & 3)**

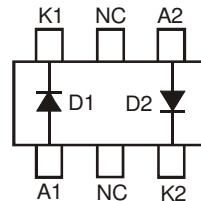
Mechanical Data

- Case: SOT963
- Case Material: Molded Plastic, "Green" Molding Compound. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminal Connections: See Diagram
- Terminals: Finish – Matte Tin Annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208
- Weight: 0.003 grams (Approximate)

SOT963



Top View



Internal Schematic

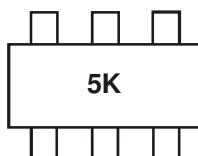
Ordering Information (Note 4)

Part Number	Case	Packaging
1SS361UDJ-7	SOT963	10,000/Tape & Reel

Notes:

1. Fully EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant. No purposely added lead.
2. Halogen and Antimony free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
3. Diodes Inc.'s "Green" policy can be found on our website at <http://www.diodes.com>.
4. For packaging details, go to our website at <http://www.diodes.com>.

Marking Information



5K = Product Type Marking Code

Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	85	V
Peak Repetitive Reverse Voltage	V_{RRM}		
Working Peak Reverse Voltage	V_{RWM}	80	V
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(\text{RMS})}$	57	V
Forward Continuous Current	I_{FM}	250	mA
Non-Repetitive Peak Forward Surge Current @ $t = 1.0\mu\text{s}$	I_{FSM}	2.0	A

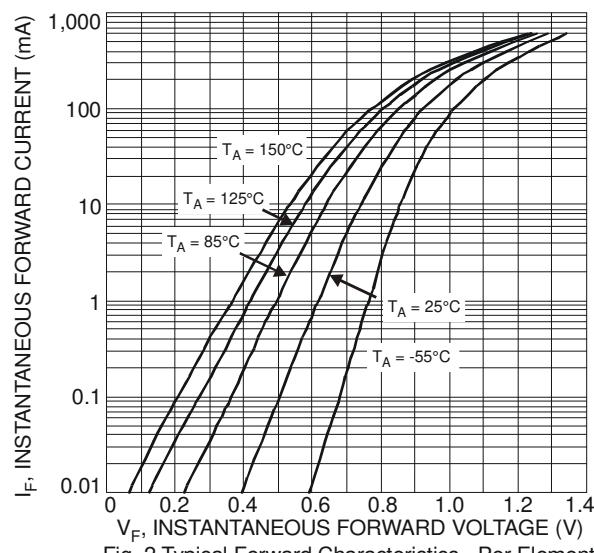
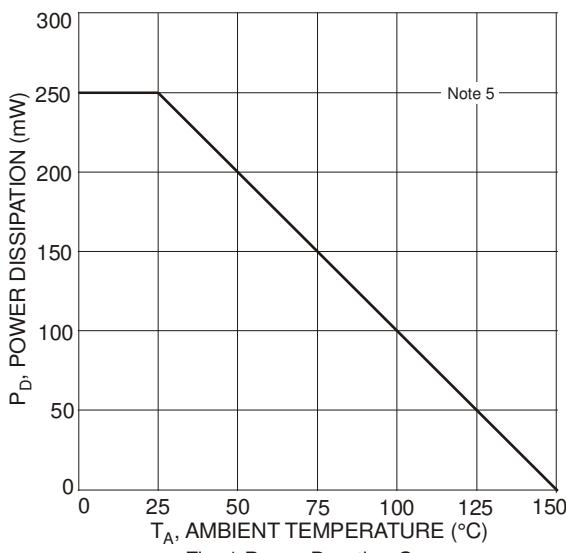
Thermal Characteristics

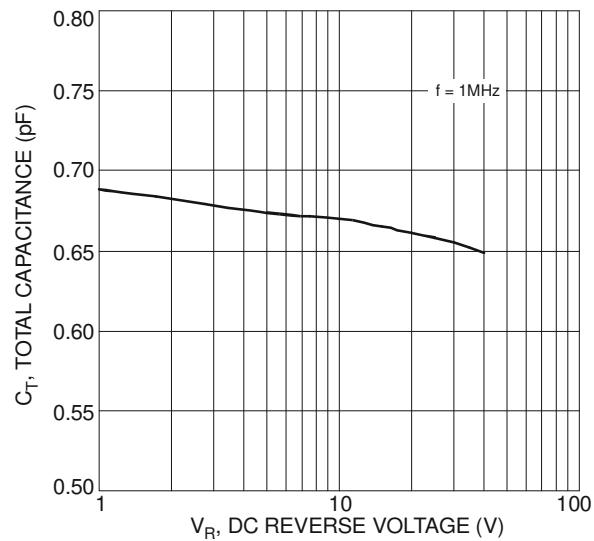
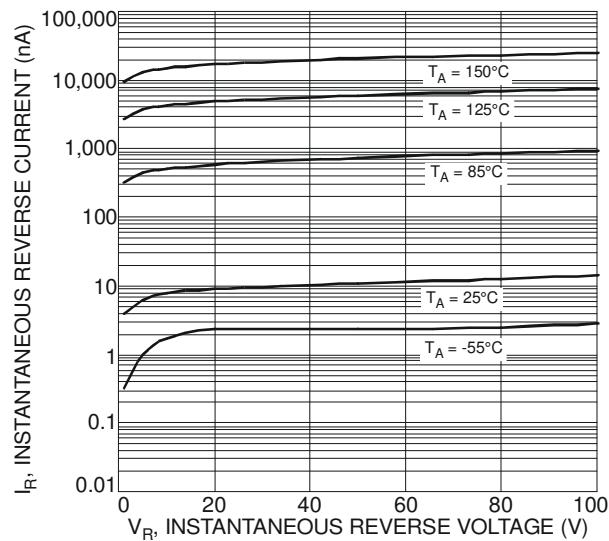
Characteristic	Symbol	Value	Unit
Power Dissipation (Note 5)	P_D	250	mW
Thermal Resistance Junction to Ambient Air (Note 5)	$R_{\theta JA}$	500	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150	°C

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

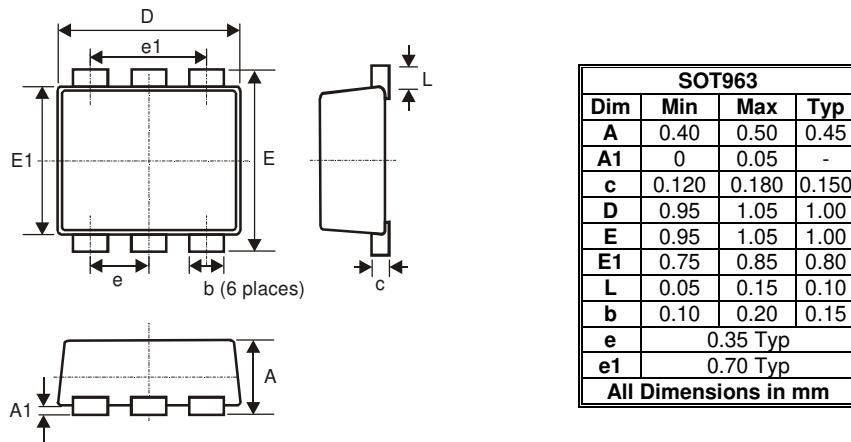
Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 6)	$V_{(BR)R}$	80	—	—	V	$I_R = 100\mu\text{A}$
Forward Voltage	V_F	—	0.62 0.75 0.95	— — 1.23	V	$I_F = 1.0\text{mA}$ $I_F = 10\text{mA}$ $I_F = 100\text{mA}$
Leakage Current (Note 6)	I_R	—	0.011 0.013	0.5 1.0	μA	$V_R = 30\text{V}$ $V_R = 80\text{V}$
Total Capacitance	C_T	—	0.7	3.0	pF	$V_R = 0, f = 1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	—	1.7	4.0	ns	$I_F = I_R = 10\text{mA}$, $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$

Notes:
 5. Part mounted on FR-4 PC board with recommended pad layout, which can be found on our website at <http://www.diodes.com>.
 6. Short duration pulse test used to minimize self-heating effect.

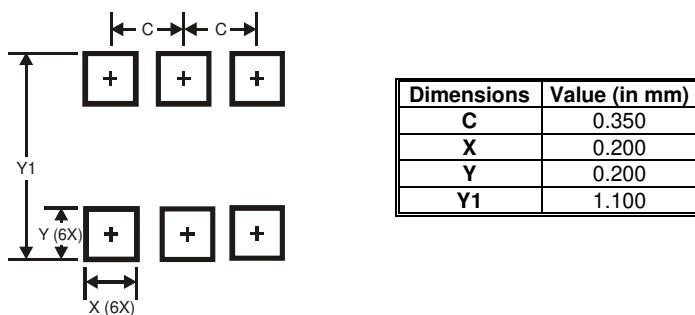




Package Outline Dimensions



Suggested Pad Layout



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