

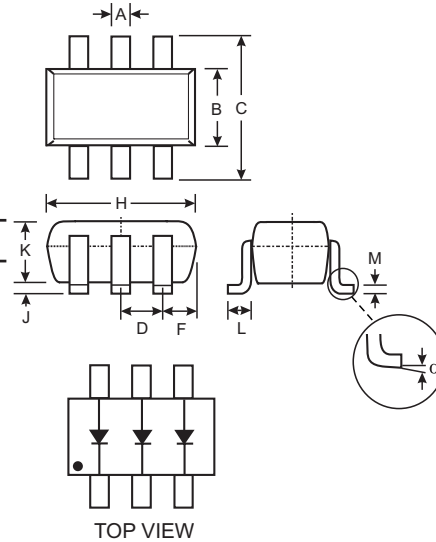
## SURFACE MOUNT SCHOTTKY BARRIER DIODE ARRAY

### Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Fast Switching
- Low Leakage Current
- Three Fully Isolated Schottky Diodes
- **Lead Free/RoHS Compliant (Note 3)**

### Mechanical Data

- Case: SOT-363
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Polarity: See Diagram
- Terminals: Solderable per MIL-STD-202, Method 208
- Lead Free Plating (Matte Tin Finish annealed over Alloy 42 leadframe).
- Marking: KLL (See Page 3)
- Ordering Information: (See Page 3)
- Weight: 0.006 grams (approx.)



SOT-363		
Dim	Min	Max
A	0.10	0.30
B	1.15	1.35
C	2.00	2.20
D	0.65 Nominal	
F	0.30	0.40
H	1.80	2.20
J	—	0.10
K	0.90	1.00
L	0.25	0.40
M	0.10	0.25
α	0°	8°
All Dimensions in mm		

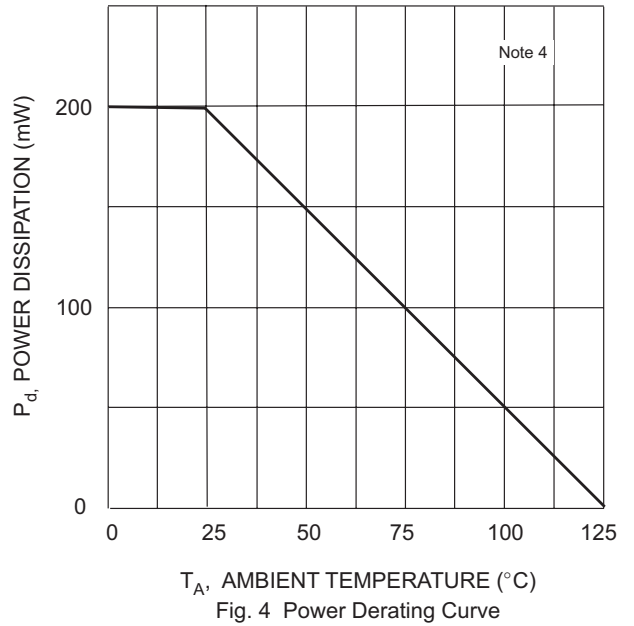
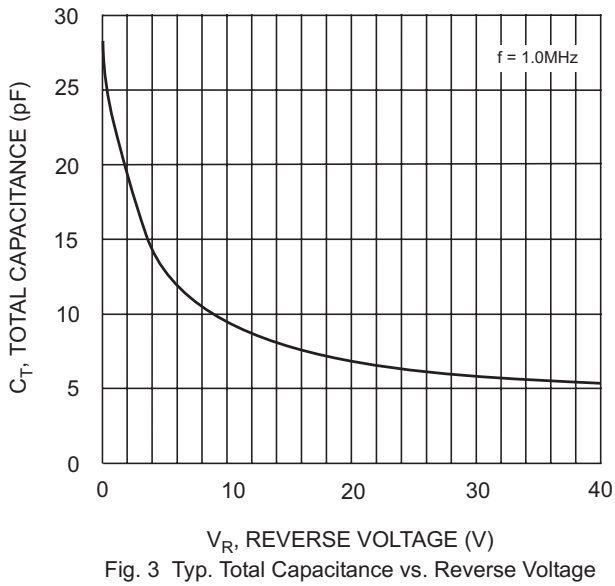
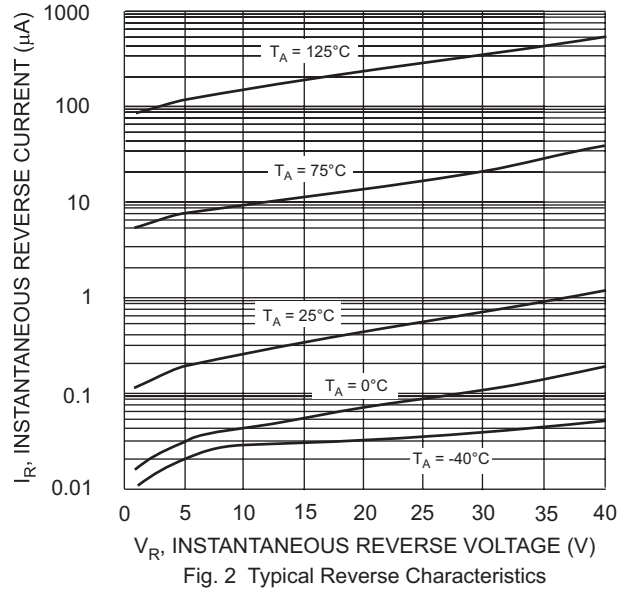
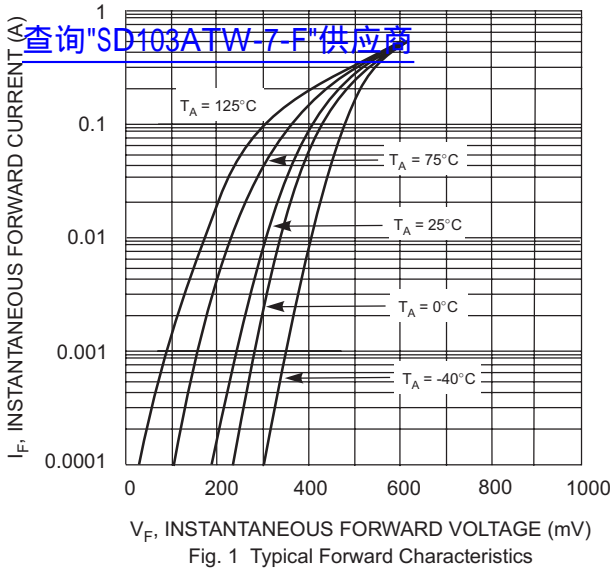
### Maximum Ratings @ T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	40	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	28	V
Forward Continuous Current (Note 1)	I <sub>FM</sub>	350	mA
Average Rectified Current (Note 1)	I <sub>O</sub>	175	mA
Non-Repetitive Peak Forward Surge Current (Note 1) @ t ≤ 10ms	I <sub>FSM</sub>	1.0	A
Power Dissipation (Note 4)	P <sub>d</sub>	200	mW
Thermal Resistance, Junction to Ambient Air (Note 4)	R <sub>θJA</sub>	500	°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-55 to +125	°C

### Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	V <sub>(BR)R</sub>	40	—	—	V	I <sub>RS</sub> = 100μA (pulsed)
Forward Voltage Drop	V <sub>F</sub>	—	0.27	—	V	I <sub>F</sub> = 1mA
		—	0.32	—	V	I <sub>F</sub> = 5mA
		—	0.36	0.37	V	I <sub>F</sub> = 20mA
		—	0.44	0.50	V	I <sub>F</sub> = 100mA
Reverse Current (Note 2)	I <sub>R</sub>	—	0.2	2.0	μA	V <sub>R</sub> = 10V
		—	0.4	5.0	μA	V <sub>R</sub> = 30V
Total Capacitance	C <sub>T</sub>	—	50	—	pF	V <sub>R</sub> = 0V, f = 1.0MHz
Reverse Recovery Time	t <sub>rr</sub>	—	10	—	ns	I <sub>F</sub> = I <sub>R</sub> = 200mA, I <sub>rr</sub> = 0.1 x I <sub>R</sub> , R <sub>L</sub> = 100Ω

- Notes: 1. This is the maximum rating of single Diode (D<sub>1</sub> or D<sub>2</sub> or D<sub>3</sub>). In the case of using two or three diodes, the maximum ratings per diode are 75% of the ratings for single diode operation.  
 2. Short duration test pulse used to minimize self-heating effect.  
 3. No purposefully added lead.  
 4. Part mounted on FR-4 board with recommended pad layout, which can be found on our website at <http://www.diodes.com/datasheets/ap02001.pdf>.

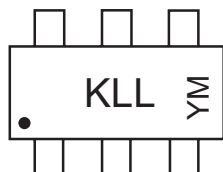


**Ordering Information** (Note 5)

查询"SD103ATW-7-F"供应商 Device	Packaging	Shipping
SD103ATW-7-F	SOT-363	3000/Tape & Reel

Notes: 5. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

**Marking Information**



KLL = Product Type Marking Code  
 YM = Date Code Marking  
 Y = Year ex: N = 2002  
 M = Month ex: 9 = September

Date Code Key

<b>Year</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	
<b>Code</b>	N	P	R	S	T	U	V	W	X	Y	Z	
<b>Month</b>	<b>Jan</b>	<b>Feb</b>	<b>March</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>Code</b>	1	2	3	4	5	6	7	8	9	O	N	D

**IMPORTANT NOTICE**

Diodes Incorporated and its subsidiaries reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. Diodes Incorporated does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Diodes Incorporated and all the companies whose products are represented on our website, harmless against all damages.

**LIFE SUPPORT**

Diodes Incorporated products are not authorized for use as critical components in life support devices or systems without the expressed written approval of the President of Diodes Incorporated.