

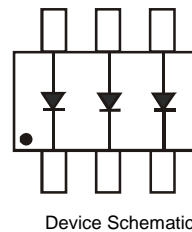
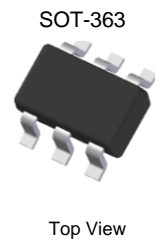
# SD103ATW-7-F

## Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Fast Switching
- Low Leakage Current
- Three Fully Isolated Schottky Diodes
- **Totally Lead-Free & Fully RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. “Green” Device (Note 3)**

## Mechanical Data

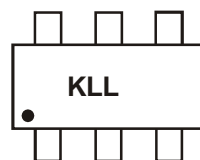
- Case: SOT-363
- Case Material: Molded Plastic, “Green” Molding Compound;  
UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Polarity: See Diagram
- Terminals: Matte Tin Finish Annealed over Alloy 42 Leadframe  
(Lead Free Plating); Solderable per MIL-STD-202, Method 208 ③
- Weight: 0.006 grams (Approximate)



## Ordering Information (Note 4)

Part Number	Case	Packaging
SD103ATW-7-F	SOT-363	3,000/Tape & Reel

## Marking Information



# SD103ATW-7-F

## Maximum Ratings (@T<sub>A</sub> = +25°C, unless otherwise specified.)

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	40	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		
DC Blocking Voltage	V <sub>R</sub>		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	28	V
Forward Continuous Current (Note 5)	I <sub>FM</sub>	350	mA
Average Rectified Current (Note 5)	I <sub>O</sub>	175	mA
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (Note 5)	I <sub>FSM</sub>	1.0	A

## Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 6)	P <sub>D</sub>	200	mW
Thermal Resistance, Junction to Ambient Air (Note 6)	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 7)	V <sub>(BR)R</sub>	40	—	—	V	I <sub>R</sub> = 100μA
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
Leakage Current (Note 7)	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> = 10mA, I <sub>rr</sub> = 0.1 x I <sub>R</sub> , R <sub>L</sub> = 100Ω

- Notes:
- 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.
  - 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>.
  - Short duration pulse test used to minimize self-heating effect.

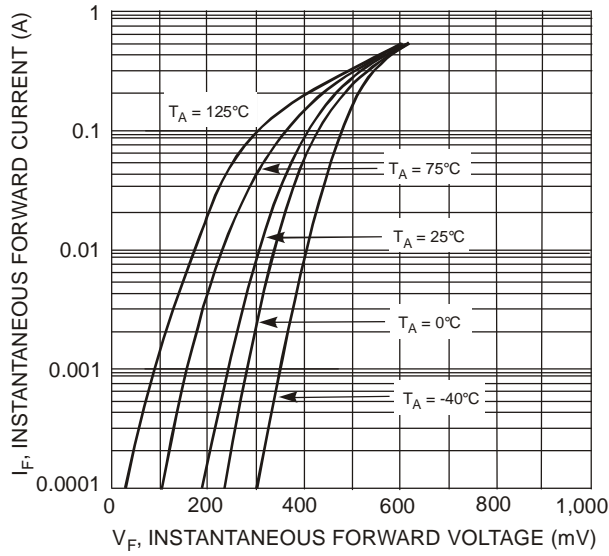


Fig. 1 Typical Forward Characteristics

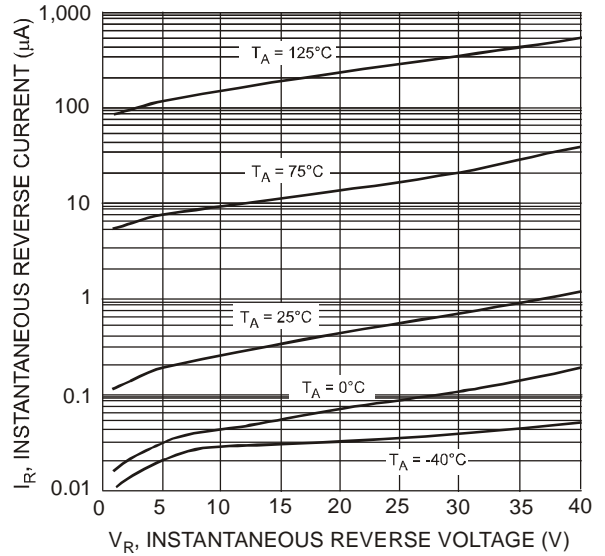


Fig. 2 Typical Reverse Characteristics

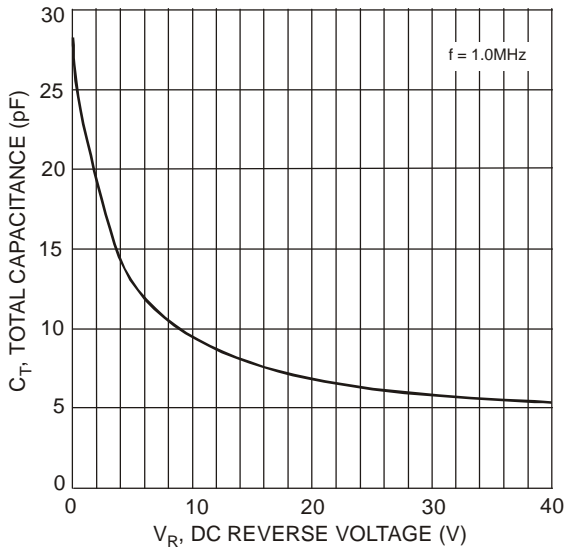


Fig. 3 Total Capacitance vs. Reverse Voltage

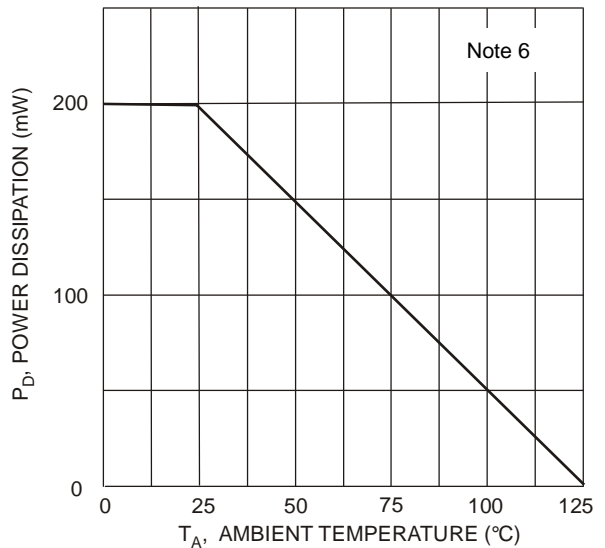
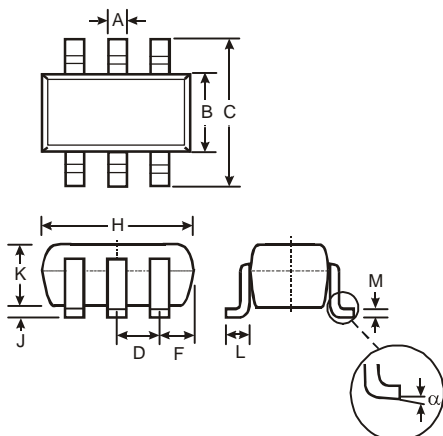


Fig. 4 Power Derating Curve

## Package Outline Dimensions



SOT-363			
Dim	Min	Max	Typ
A	0.10	0.30	0.25
B	1.15	1.35	1.30
C	2.00	2.20	2.10
D	0.65 Typ		
F	0.40	0.45	0.425
H	1.80	2.20	2.15
J	0	0.10	0.05
K	0.90	1.00	1.00
L	0.25	0.40	0.30
M	0.10	0.22	0.11
α	0°	8°	-
All Dimensions in mm			

单击下面可查看定价，库存，交付和生命周期等信息

[>>YONGYUTAI\(永裕泰\)](#)