



**THE DATASHEET OF  
1SS383T1G**



# 1SS383T1G

Preferred Device

## Dual Schottky Diode

Dual 40 V, 300 mA Low  $V_F$  Schottky Diodes in 4-lead SC-82 package.

### Features

- Low Forward Voltage:  $V_F = 0.48$  V (typ) @  $I_F = 100$  mA
- Low Reverse Current:  $I_R = 5$   $\mu$ A (max)
- This is a Pb-Free Device\*

### MAXIMUM RATINGS ( $T_A = 25^\circ\text{C}$ )

Rating	Symbol	Max	Unit
Continuous Reverse Voltage	$V_R$	40	V
Maximum Peak Forward Current*	$I_{FM}$	300	mA
Peak Forward Surge Current Pulse Width = 10 $\mu$ s	$I_{FM}(\text{surge})$	500	mA

### THERMAL CHARACTERISTICS

Characteristic (Both Junctions Heated)	Symbol	Max	Unit
Total Device Dissipation $T_A = 25^\circ\text{C}$ Derate above $25^\circ\text{C}$	$P_D$	200 (Note 1) 1.6 (Note 1)	mW mW/ $^\circ\text{C}$
Thermal Resistance, Junction-to-Ambient	$R_{\theta JA}$	625 (Note 1)	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature	$T_J, T_{stg}$	-55 to +150	$^\circ\text{C}$

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

\*Both Devices Active

1. FR-4 @ Minimum Pad.

### ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

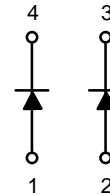
Characteristic	Symbol	Min	Typ	Max	Unit
Forward Voltage ( $I_F = 1.0$ mA) ( $I_F = 10$ mA) ( $I_F = 100$ mA)	$V_F$	-	280 360 540	- 600	mV
Reverse Current ( $V_R = 40$ V)	$I_R$	-	-	5	$\mu$ A
Capacitance ( $V_R = 0$ , $f = 1.0$ MHz)	$C_D$	-	-	25	pF

\*For additional information on our Pb-Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.



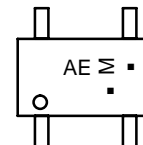
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SC-82  
CASE 900AA

### MARKING DIAGRAM



AE = Specific Device Code

M = Date Code

■ = Pb-Free Package

(Note: Microdot may be in either location)

### ORDERING INFORMATION

Device	Package	Shipping†
1SS383T1G	SC-82 (Pb-Free)	3000/Tape & Reel

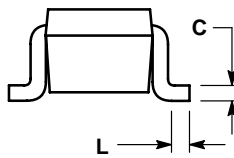
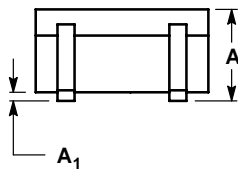
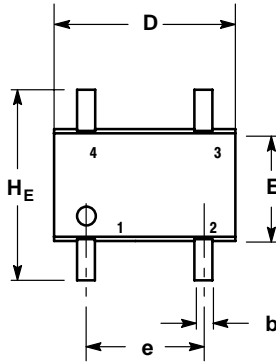
†For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification Brochure, BRD8011/D.

Preferred devices are recommended choices for future use and best overall value.

# 1SS383T1G

## PACKAGE DIMENSIONS

SC-82, 4 LEAD, GULL WING  
CASE 900AA-01  
ISSUE O



### NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH THICKNESS. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS A AND B DO NOT INCLUDE MOLD FLASH, PROTRUSIONS, OR GATE BURRS.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.035	0.04
A <sub>1</sub>	0	---	0.10	0	---	0.004
b	0.10	0.20	0.30	0.004	0.008	0.012
C	0.10	0.18	0.25	0.004	0.007	0.010
D	1.80	2.00	2.20	0.071	0.079	0.087
E	1.15	1.25	1.35	0.045	0.049	0.053
e	1.30 BSC			0.051 BSC		
H <sub>E</sub>	2.00	2.10	2.20	0.079	0.083	0.087
L	0.10	0.20	0.30	0.004	0.008	0.012

### STYLE 1:

1. ANODE 1
2. ANODE 2
3. CATHODE 2
4. CATHODE 1

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