

# 1SS383T1G, 1SS383T2G

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)
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish

### 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

\*Both Devices Active

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

Rating	Symbol	Max	Unit
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### 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	$^\circ\text{C}$

1. FR-4 @ Minimum Pad.

### ELECTRICAL CHARACTERISTICS

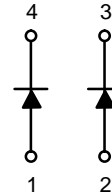
( $T_A = 25^\circ\text{C}$  unless otherwise noted)

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



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SC-82  
CASE 900AA

### MARKING DIAGRAM



AE = Specific Device Code  
D = Date Code

### ORDERING INFORMATION

Device	Package	Shipping†
1SS383T1G	SC-82	4 mm pitch 3000/Tape & Reel
1SS383T2G	SC-82	4 mm pitch 3000/Tape & Reel

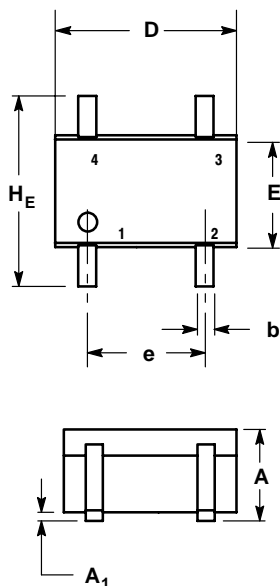
†For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification Brochure, BRD8011/D.

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

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## 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:

- PIN 1. ANODE 1
- ANODE 2
- CATHODE 2
- CATHODE 1

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