# 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:  $V_F = 0.48 \text{ V (typ)}$  @  $I_F = 100 \text{ mA}$
- Low Reverse Current:  $I_R = 5 \mu A \text{ (max)}$
- Pb–Free Package May be Available. The G–Suffix Denotes a Pb–Free Lead Finish

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

Rating	Symbol	Max	Unit
Continuous Reverse Voltage	V <sub>R</sub>	40	V
Maximum Peak Forward Current*	I <sub>FM</sub>	300	mA
Peak Forward Surge Current Pulse Width = 10 μs	I <sub>FM(surge)</sub>	500	mA

<sup>\*</sup>Both Devices Active

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

Rating	Symbol	Max	Unit

## THERMAL CHARACTERISTICS

Characteristic (Both Junctions Heated)	Symbol	Max	Unit
Total Device Dissipation $T_A = 25$ °C Derate above 25°C	P <sub>D</sub>	200 (Note 1) 1.6 (Note 1)	mW mW/°C
Thermal Resistance Junction-to-Ambient	$R_{\theta JA}$	625 (Note 1)	°C/W
Junction and Storage Temperature	T <sub>J</sub> , T <sub>stg</sub>	-55 to +150	°C

<sup>1.</sup> FR-4 @ Minimum Pad.

## **ELECTRICAL CHARACTERISTICS**

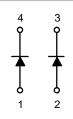
 $(T_A = 25^{\circ}C \text{ unless otherwise noted})$ 

Characteristic	Symbol	Min	Тур	Max	Unit
Forward Voltage (I <sub>F</sub> = 1.0 mA) (I <sub>F</sub> = 10 mA) (I <sub>F</sub> = 100 mA)	V <sub>F</sub>	- - -	280 360 540	- - 600	mV
Reverse Current (V <sub>R</sub> = 40 V)	I <sub>R</sub>	1	-	5	μΑ
Capacitance (V <sub>R</sub> = 0, f = 1.0 MHz)	C <sub>D</sub>	1	-	25	pF



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SC-82 CASE 900AA

#### MARKING DIAGRAM



AE = Specific Device Code

D = Date Code

## ORDERING INFORMATION

Device	Package	Shipping <sup>†</sup>
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.

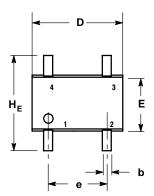
**Preferred** devices are recommended choices for future use and best overall value.

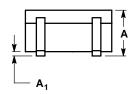
## 1SS383T1G, 1SS383T2G

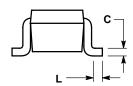
## PACKAGE DIMENSIONS

## SC-82, 4 LEAD, GULL WING

CASE 900AA-01 ISSUE O







#### NOTES:

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

	MIL	LIMETE	RS	INCHES		
DIM	MIN	NOM	MAX	MIN	NOM	MAX
Α	0.80	0.90	1.00	0.032	0.035	0.04
<b>A</b> 1	0		0.10	0		0.004
b	0.10	0.20	0.30	0.004	0.008	0.012
С	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
Е	1.15	1.25	1.35	0.045	0.049	0.053
Ф		1.30 BSC		(	0.051 BS	SC SC
HE	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

- 2. ANODE 2 3. CATHODE 2

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