

# 2SA1576ART1

## General Purpose Amplifier Transistors

### PNP Surface Mount

- Moisture Sensitivity Level: 1

#### MAXIMUM RATINGS (T<sub>A</sub> = 25°C)

Rating	Symbol	Value	Unit
Collector–Base Voltage	V <sub>(BR)CBO</sub>	60	Vdc
Collector–Emitter Voltage	V <sub>(BR)CEO</sub>	50	Vdc
Emitter–Base Voltage	V <sub>(BR)EBO</sub>	7.0	Vdc
Collector Current – Continuous	I <sub>C</sub>	100	mAdc
Collector Current – Peak	I <sub>C(P)</sub>	200	mAdc

#### THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Power Dissipation	P <sub>D</sub>	200	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	–55 to +150	°C

Maximum ratings are those values beyond which device damage can occur. Maximum ratings applied to the device are individual stress limit values (not normal operating conditions) and are not valid simultaneously. If these limits are exceeded, device functional operation is not implied, damage may occur and reliability may be affected.

#### ELECTRICAL CHARACTERISTICS

(T<sub>A</sub> = 25°C unless otherwise noted)

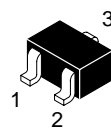
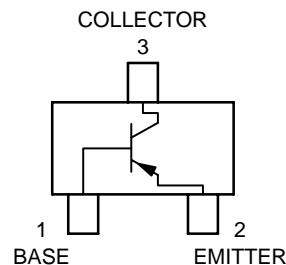
Characteristic	Symbol	Min	Max	Unit
Collector–Emitter Breakdown Voltage (I <sub>C</sub> = 2.0 mAdc, I <sub>B</sub> = 0)	V <sub>(BR)CEO</sub>	50	–	Vdc
Collector–Base Breakdown Voltage (I <sub>C</sub> = 10 μAdc, I <sub>E</sub> = 0)	V <sub>(BR)CBO</sub>	60	–	Vdc
Emitter–Base Breakdown Voltage (I <sub>E</sub> = 10 μAdc, I <sub>C</sub> = 0)	V <sub>(BR)EBO</sub>	7.0	–	Vdc
Collector–Base Cutoff Current (V <sub>CB</sub> = 60 Vdc, I <sub>E</sub> = 0)	I <sub>CB0</sub>	–	0.1	μAdc
Collector–Emitter Cutoff Current (V <sub>CE</sub> = 10 Vdc, I <sub>B</sub> = 0) (V <sub>CE</sub> = 30 Vdc, I <sub>B</sub> = 0) (V <sub>CE</sub> = 30 Vdc, I <sub>B</sub> = 0, T <sub>A</sub> = 80°C)	I <sub>CEO</sub>	–	0.1 2.0 1.0	μAdc μAdc mAdc
DC Current Gain (Note 1) (V <sub>CE</sub> = 6.0 Vdc, I <sub>C</sub> = 2.0 mAdc)	h <sub>FE</sub>	180	390	–
Collector–Emitter Saturation Voltage (I <sub>C</sub> = 100 mAdc, I <sub>B</sub> = 10 mAdc)	V <sub>CE(sat)</sub>	–	0.5	Vdc

1. Pulse Test: Pulse Width ≤ 300 μs, D.C. ≤ 2%.



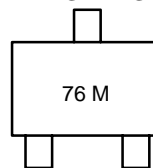
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<http://onsemi.com>



SC-70  
CASE 419

#### MARKING DIAGRAM



76 = Specific Device Code  
M = Date Code

#### ORDERING INFORMATION

Device*	Package	Shipping†
2SA1576ART1	SC-70	3000/Tape & Reel

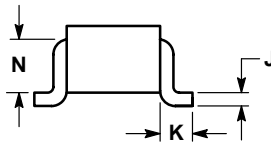
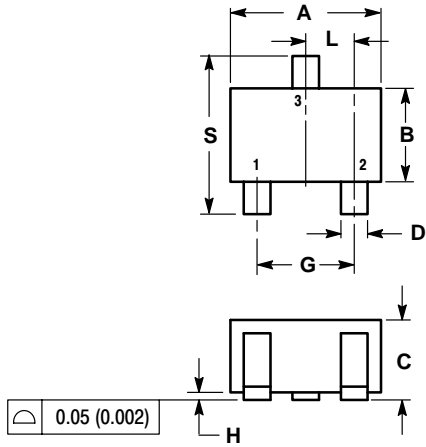
\*The "T1" suffix refers to a 7 inch reel.

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

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## PACKAGE DIMENSIONS

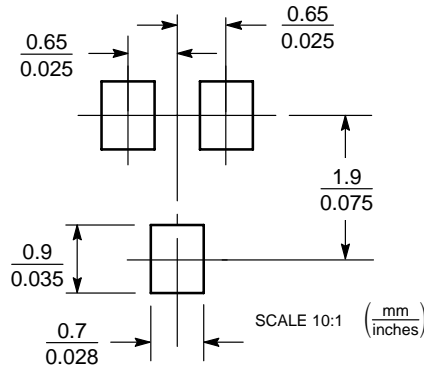
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ISSUE L




- NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
  2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.071	0.087	1.80	2.20
B	0.045	0.053	1.15	1.35
C	0.032	0.040	0.80	1.00
D	0.012	0.016	0.30	0.40
G	0.047	0.055	1.20	1.40
H	0.000	0.004	0.00	0.10
J	0.004	0.010	0.10	0.25
K	0.017 REF		0.425 REF	
L	0.026 BSC		0.650 BSC	
N	0.028 REF		0.700 REF	
S	0.079	0.095	2.00	2.40

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