



## DESCRIPTION

The 2SA1576AQ~2SA1576AS are available in SC-70 package

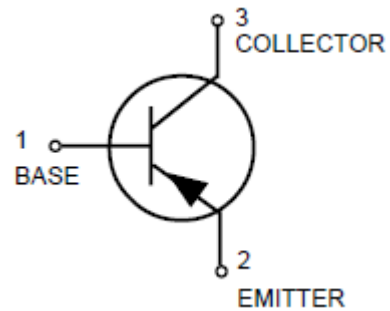
## FEATURES

- RoHS Compliant
- Available in SC-70 package

## ORDERING INFORMATION

Package Type	Part Number
SC-70	2SA1576AQ
	2SA1576AR
	2SA1576AS
Note	3,000pcs/ Reel
AiT provides all RoHS Compliant Products	

## PIN DESCRIPTION





## ABSOLUTE MAXIMUM RATINGS

V <sub>CEO</sub> , Collector-Emitter Voltage	-50V
V <sub>CBO</sub> , Collector-Base Voltage	-60V
V <sub>EBO</sub> , Emitter-Base Voltage	-6.0V
I <sub>C</sub> , Collector Current-Continuous	-150mA
P <sub>C</sub> , Collector Power Dissipation	0.15W
T <sub>J</sub> , Junction Temperature	150°C
T <sub>STG</sub> , Storage Temperature	-55°C ~ +150°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

## ELECTRICAL CHARACTERISTICS

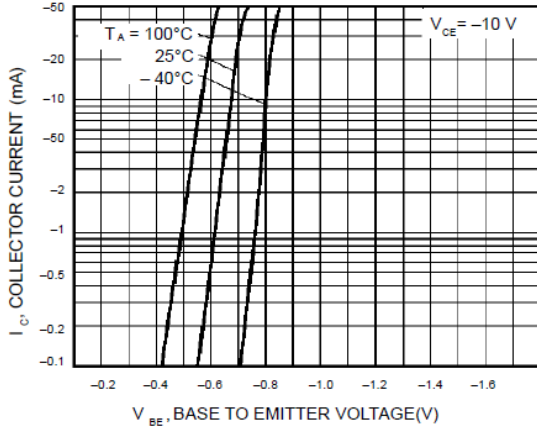
T<sub>A</sub> = 25°C, unless otherwise noted.

Parameter	Symbol	Characteristic	Min.	Typ.	Max.	Unit	
Collector-Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =-1mA	-50	-	-	V	
Emitter-Base Breakdown Voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =-50μA	-6	-	-	V	
Collector-Base Breakdown Voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =-50μA	-60	-	-	V	
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> =-60V	-	-	-0.1	μA	
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =-6V	-	-	-0.1	μA	
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> /I <sub>B</sub> =-50mA/-5mA	-	-	-0.5	V	
DC Current Transfer Ratio	h <sub>FE</sub>	V <sub>CE</sub> = -6V, I <sub>C</sub> = -1mA	Q	120	-	270	-
			R	180	-	390	
			S	270	-	560	
Transition Frequency	f <sub>T</sub>	V <sub>CB</sub> =-12V, I <sub>E</sub> =2mA, f=30MHz	-	140	-	MHz	
Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =-12 V, I <sub>E</sub> =0A, f=1MHz	-	4.0	5.0	pF	

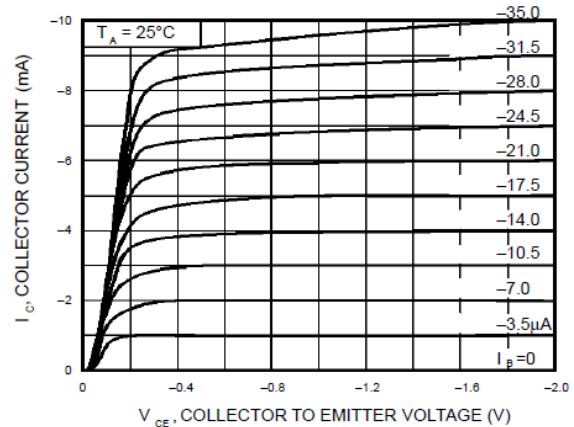


## TYPICAL CHARACTERISTICS

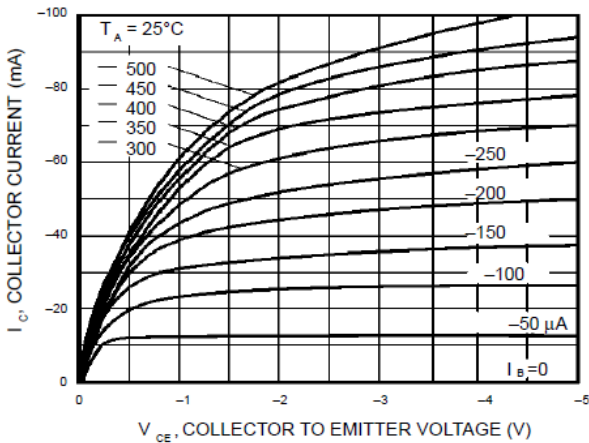
1. Grounded emitter propagation characteristics



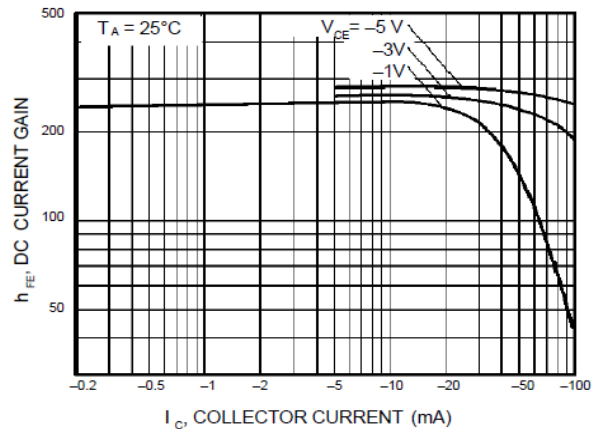
2. Grounded emitter output characteristics(I)



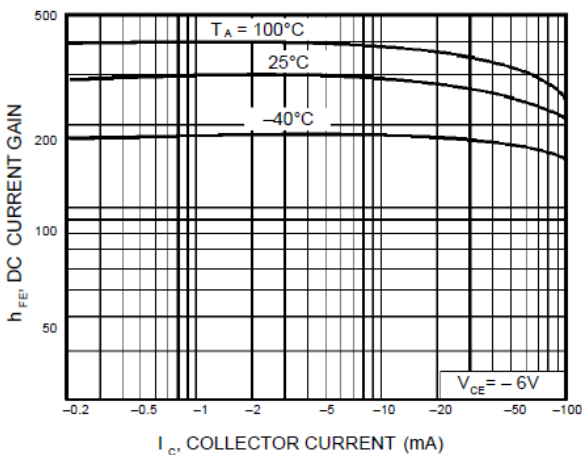
3. Grounded emitter output characteristics(II)



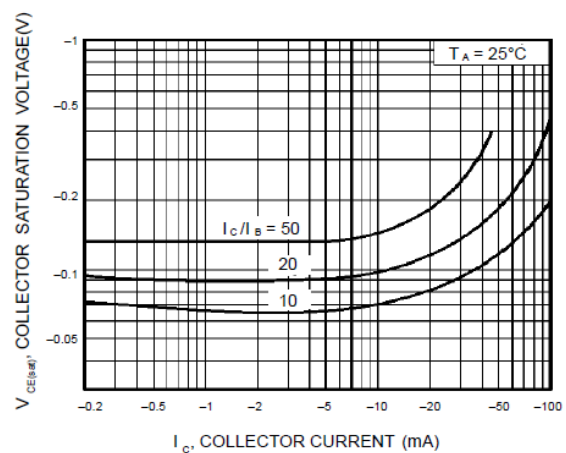
4. DC current gain vs. collector current (I)



5. DC current gain vs. collector current (II)

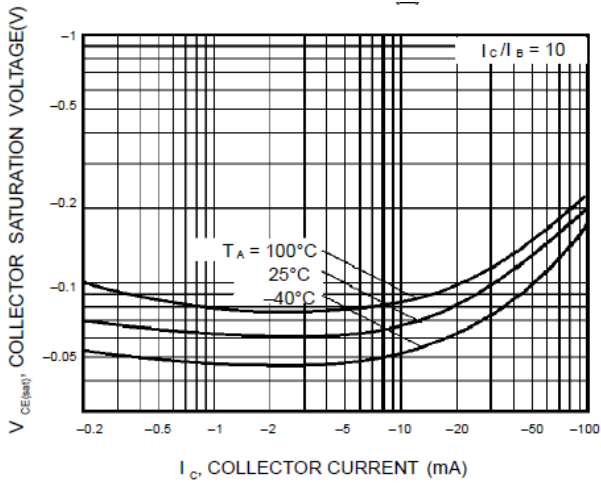


6. Collector-emitter saturation voltage vs. collector current (I)

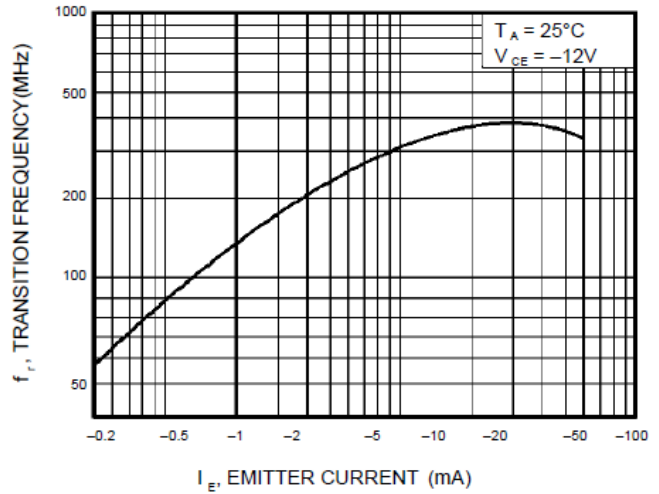




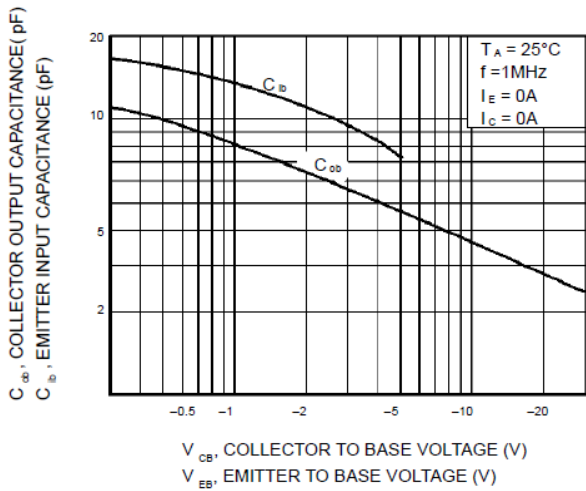
7. Collector-emitter saturation voltage vs. collector current (II)



8. Gain bandwidth product vs. emitter current



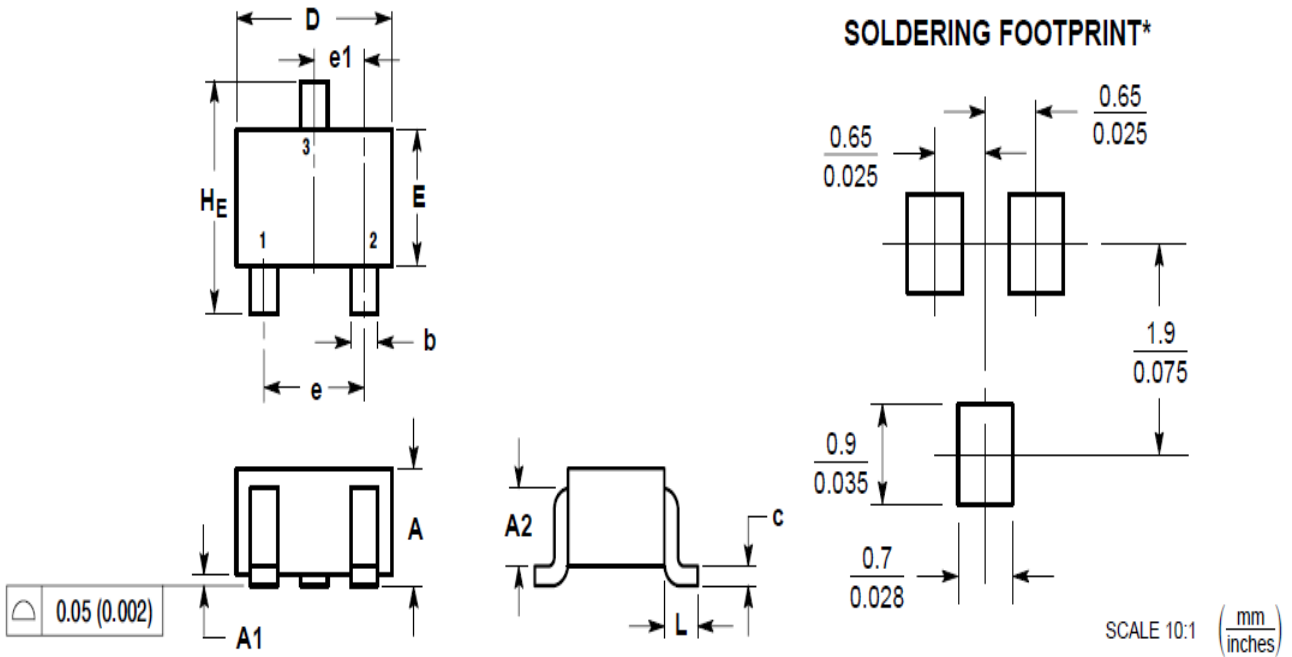
9. Collector output capacitance vs. collector-base voltage  
Emitter input capacitance vs. emitter-base voltage





**PACKAGE INFORMATION**

Dimension in SC-70 Package (Unit: mm)



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.80	1.00	0.032	0.040
A1	0.00	0.10	0.000	0.004
A2	0.7 REF		0.028 REF	
b	0.30	0.40	0.012	0.016
c	0.10	0.25	0.004	0.010
D	1.80	2.20	0.071	0.087
E	1.15	1.35	0.045	0.053
e	1.20	1.40	0.047	0.055
e1	0.65 BSC		0.026 BSC	
L	0.425 REF		0.017 REF	
HE	2.00	2.40	0.079	0.095



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