DESCRIPTION

The 2SA1774Q~2SA1774S are available in SC-89 package

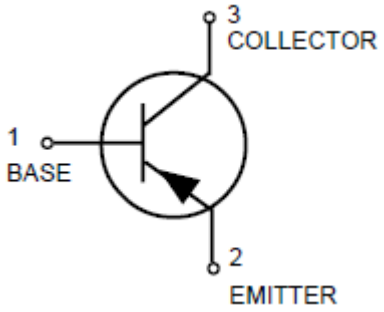
FEATURES

- Available in SC-89 package

ORDERING INFORMATION

Package Type	Part Number
SC-89	2SA1774Q
	2SA1774R
	2SA1774S
Note	SPQ: 3,000pcs/ Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION



ABSOLUTE MAXIMUM RATINGS

V_{CBO}, Collector-Base Voltage	-60V
V_{CEO}, Collector-Emitter Voltage	-50V
V_{EBO}, Emitter-Base Voltage	-6.0V
I_C, Collector Current	-0.15A(DC)
P_C, Collector Power Dissipation	0.15W
T_J, Junction Temperature	150℃
T_{STG}, Storage Temperature	-55℃ ~ +150℃

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.

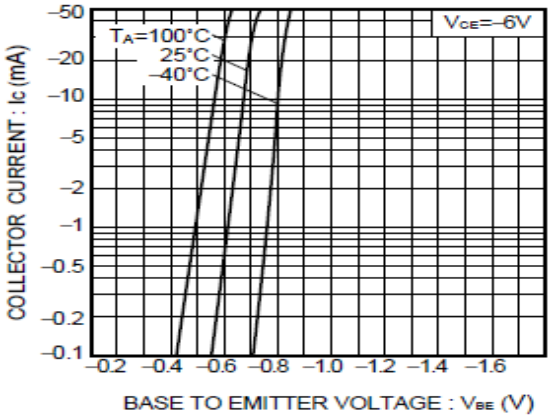
ELECTRICAL CHARACTERISTICS

T_A = 25°C

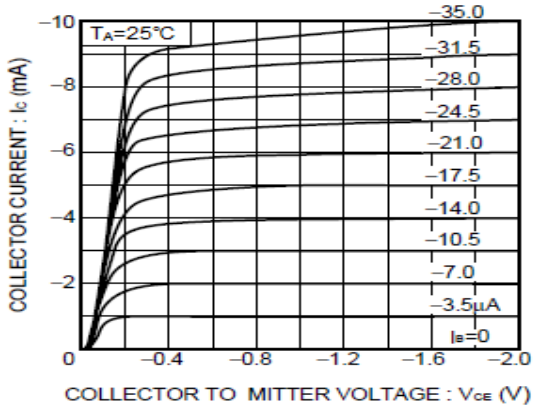
Parameter	Symbol	Characteristic		Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=-50μA		-60	-	-	V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=-1μA		-50	-	-	V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E=-50μA		-6	-	-	V
Collector Cutoff Current	I_{CBO}	V_{CB}=-60V		-	-	-0.1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=-6V		-	-	-0.1	μA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C/I_B=-50mA/-5mA		-	-	-0.5	V
DC Current Transfer Ratio	h_{FE}	V_{CE} =-6V, I_C= -1mA	Q	120	-	270	-
			R	180	-	390	
			S	270	-	560	
Transition Frequency	f_T	V_{CE}=−12V, I_E=2mA, f=30MHz		-	140	-	MHz
Output Capacitance	C_{ob}	V_{CB}=-12V, I_E=0A, f=1MHz		-	4.0	5.0	pF

TYPICAL CHARACTERISTICS

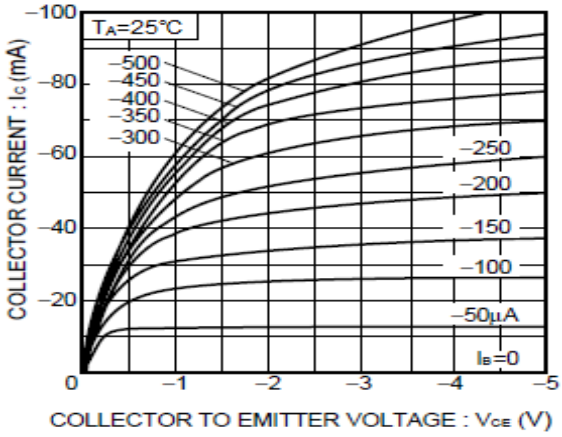
1. Grounded emitter propagation characteristics



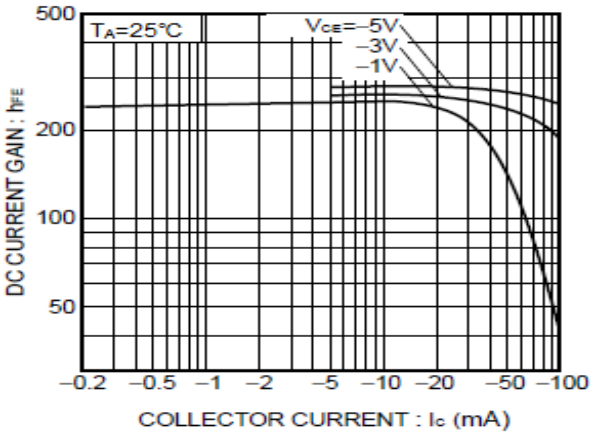
2. Grounded emitter output characteristics(I)



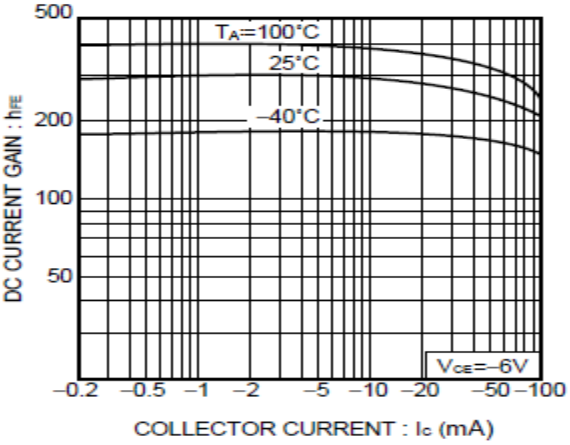
3. Grounded emitter output characteristics(II)



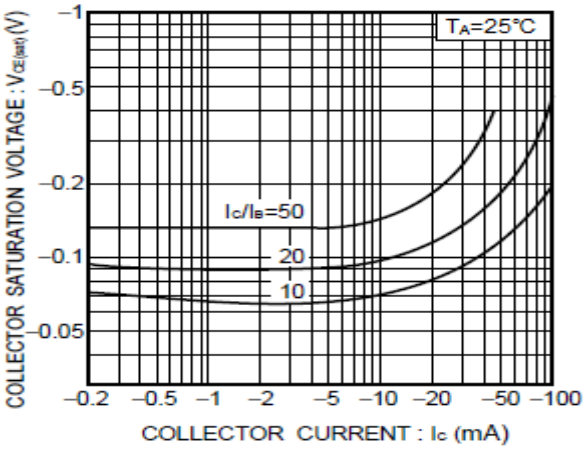
4. DC current gain vs. collector current (I)



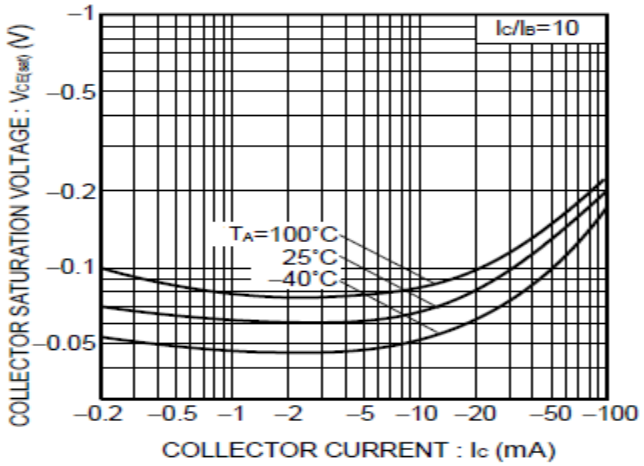
5. DC current gain vs. collector current (II)



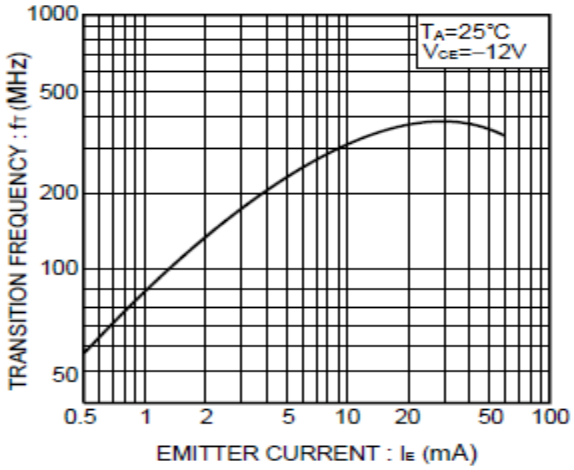
6. Collector-emitter saturation voltage vs. collector current (I)



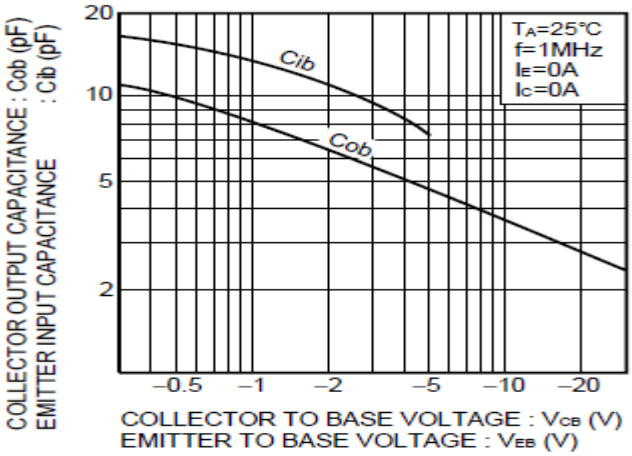
7. Collector-emitter saturation voltage vs. collector current (II)



8. Gain bandwidth product vs. emitter current

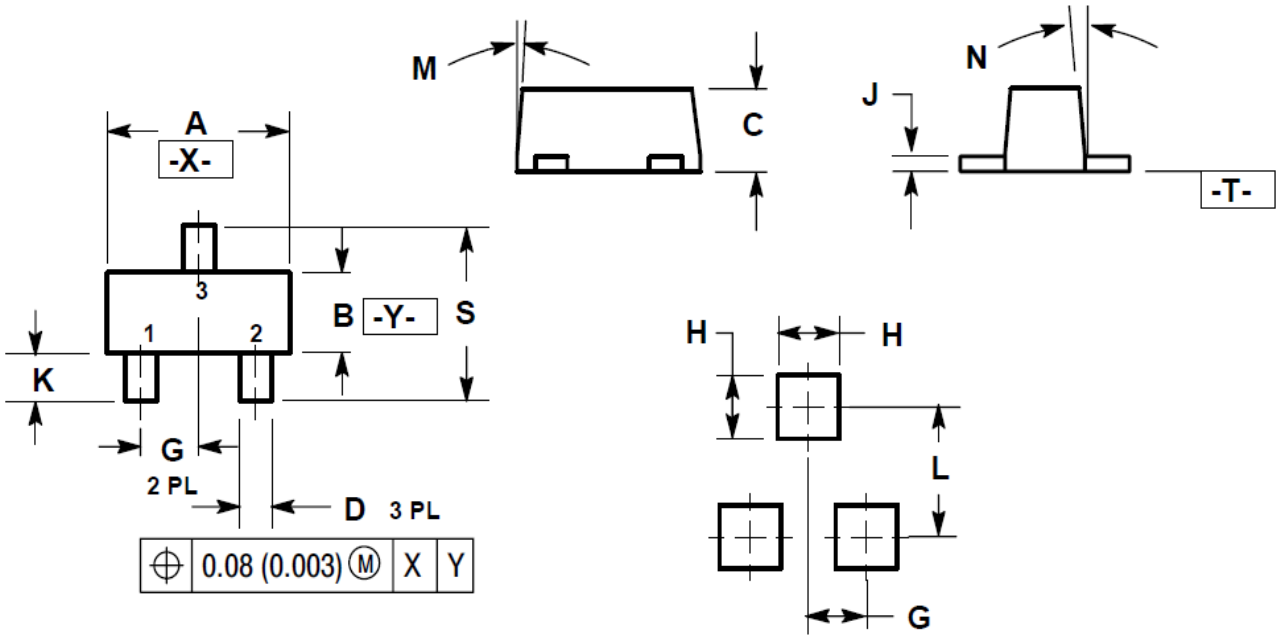


9. Collector output capacitance vs. collector-base voltage
Emitter input capacitance vs. emitter-base voltage



PACKAGE INFORMATION

Dimension in SC-89 Package (Unit: mm)



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.50	1.70	0.059	0.067
B	0.75	0.95	0.030	0.040
C	0.60	0.80	0.024	0.031
D	0.23	0.33	0.009	0.013
G	0.50 BSC		0.020 BSC	
H	0.53 REF		0.021 REF	
J	0.10	0.20	0.004	0.008
K	0.30	0.50	0.012	0.020
L	1.10 REF		0.043 REF	
M	-	10°	-	10°
N	-	10°	-	10°
S	1.50	1.70	0.059	0.067

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