



DESCRIPTION

The 2SC4617Q~2SC4617S are available in SC-89 package

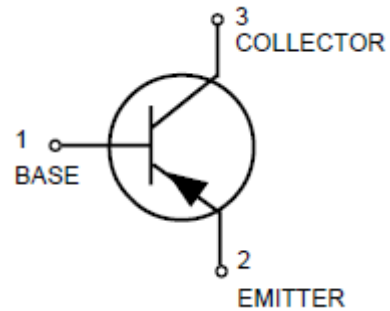
FEATURES

- RoHS Compliant
- Available in SC-89 package

ORDERING INFORMATION

Package Type	Part Number
SC-89	2SC4617Q
	2SC4617R
	2SC4617S
Note	3,000pcs/ Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION





ABSOLUTE MAXIMUM RATINGS

$T_A=25^{\circ}\text{C}$

V_{CBO} , Collector-Base Voltage	60V
V_{CEO} , Collector-Emitter Voltage	50V
V_{EBO} , Emitter-Base Voltage	7V
I_C , Collector Current	0.15A
P_C , Collector Power Dissipation	0.15W
T_J , Junction Temperature	150°C
T_{STG} , 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

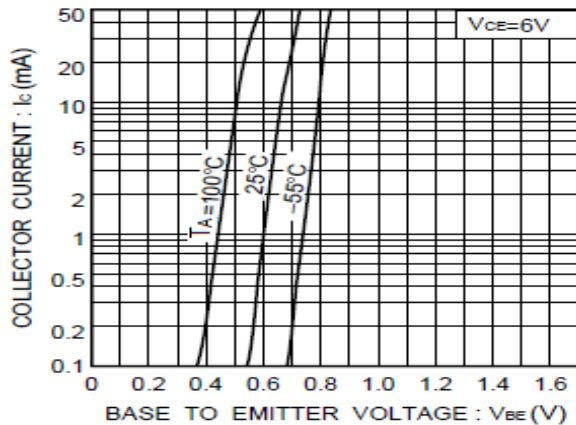
$T_A = 25^{\circ}\text{C}$

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 =-1mA		50	-	-	V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E =-50μA		7	-	-	V
Collector Cutoff Current	I _{CBO}	V _{CB} =60V		-	-	0.1	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} =7V		-	-	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		-	180	-	MHz
Output Capacitance	C _{ob}	V _{CB} =12V, I _E =0A, f=1MHz		-	2.0	3.5	pF

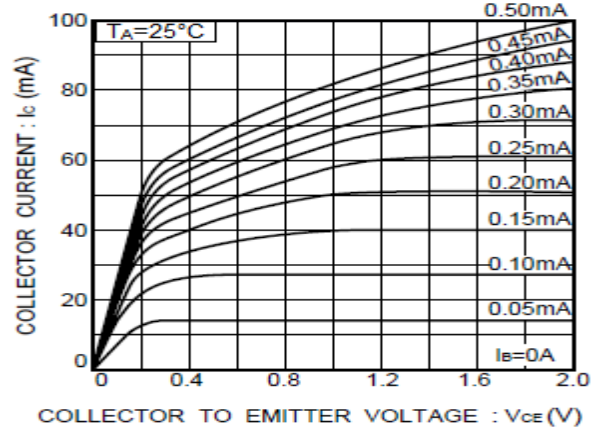


TYPICAL CHARACTERISTICS

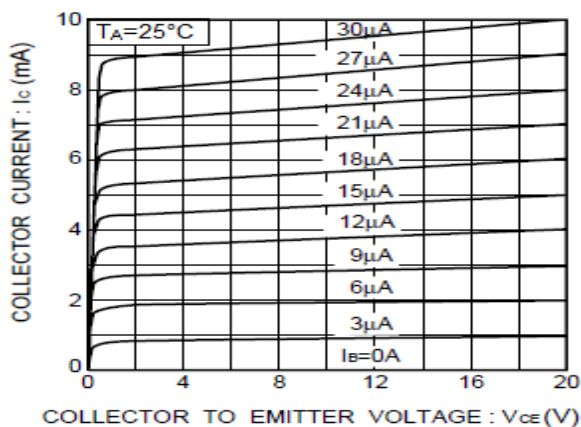
1. Grounded emitter propagation characteristics



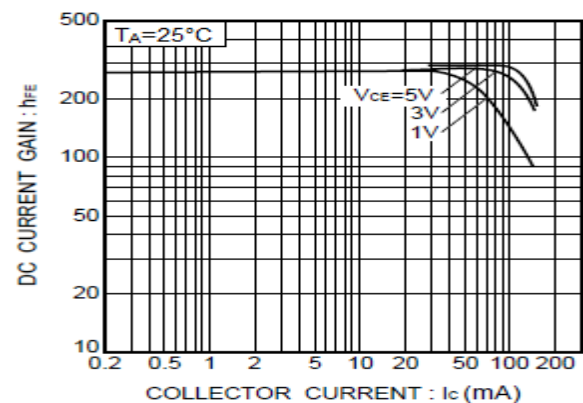
2. Grounded emitter output characteristics(I)



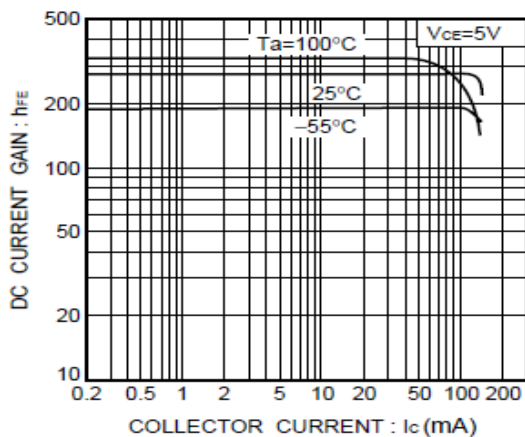
3. Grounded emitter output characteristics(II)



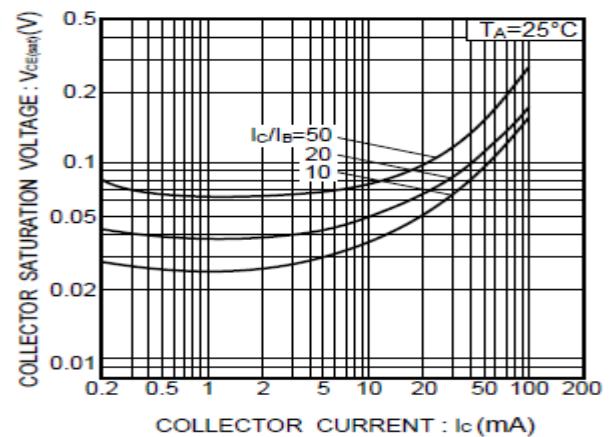
4. DC current gain vs. collector current (I)



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

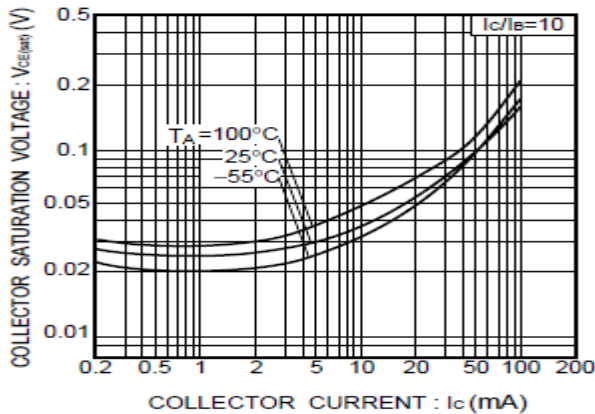


6. Collector-emitter saturation voltage vs. collector current

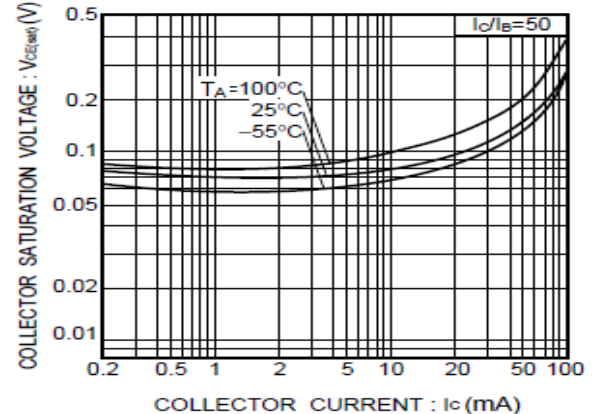




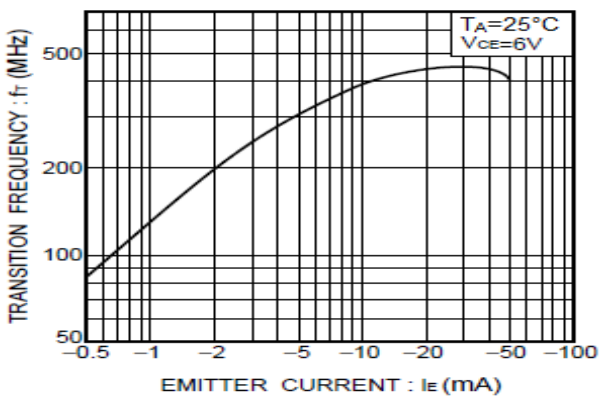
7. Collector-emitter saturation voltage vs. collector current (I)



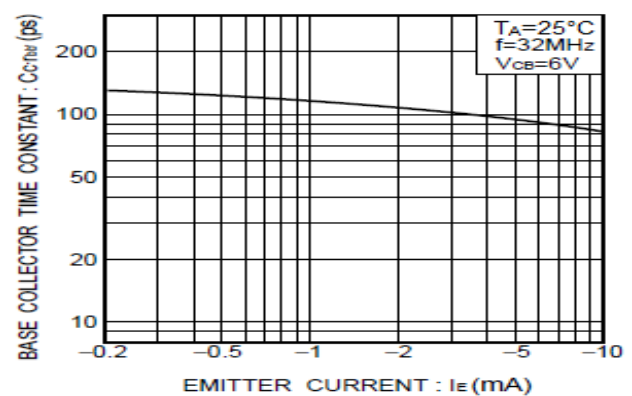
8. Collector-emitter saturation voltage vs. collector current (II)



9. Gain bandwidth product vs. emitter current

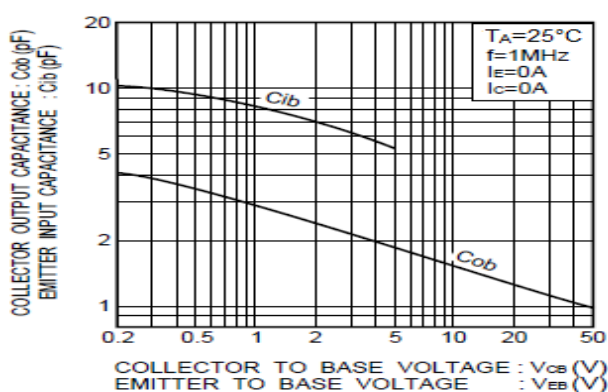


10. Base-collector time constant vs. emitter current



11. Collector output capacitance vs. collector-base voltage

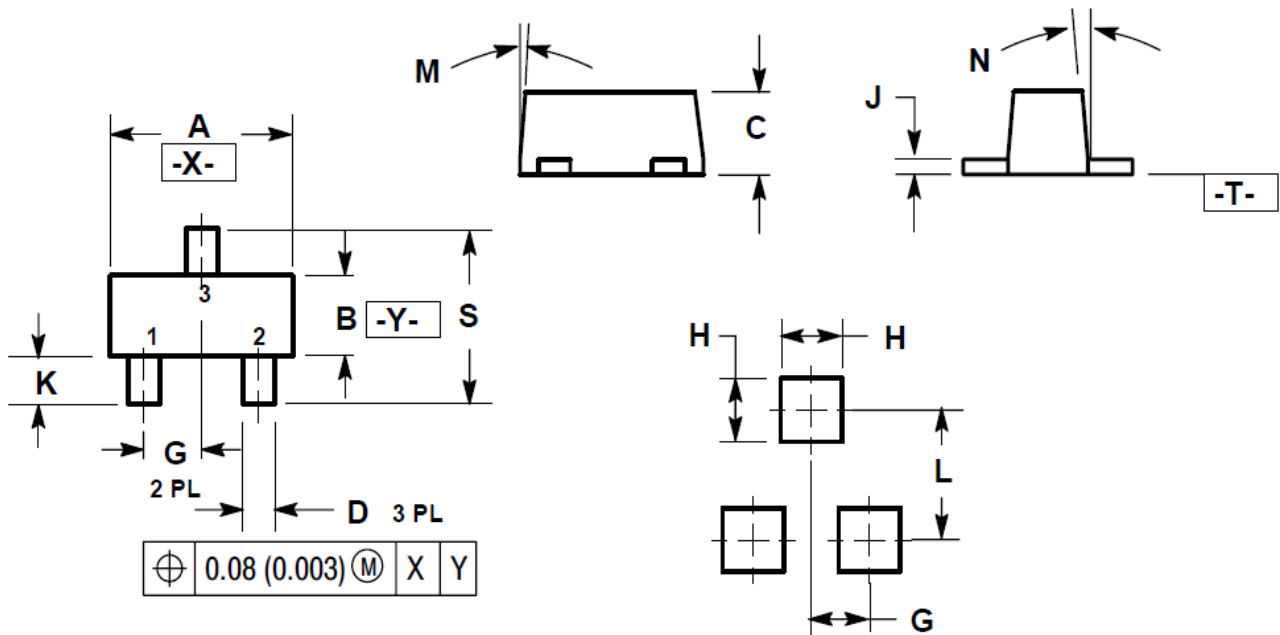
Emitter input capacitance vs. emitter-base voltage





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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