Elektronische Bauelemente

2SC4617

0.15A , 60V

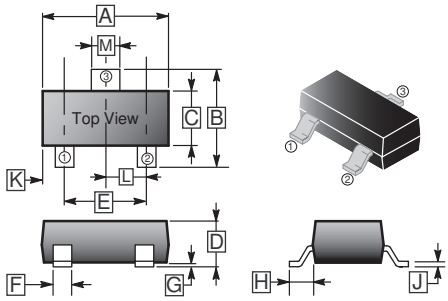
NPN Silicon General Purpose Transistor

RoHS Compliant Product
A suffix of "-C" specifies halogen and lead free

FEATURES

- Low C_{ob}. C_{ob}=2.0pF
- Complement of 2SA1774

SOT-523



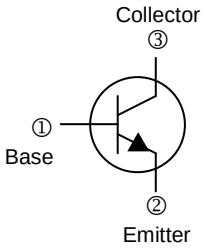
REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.5	1.7	G	-	0.1
B	1.45	1.75	H	0.55 REF.	
C	0.75	0.85	J	0.1	0.2
D	0.7	0.9	K	-	
E	0.9	1.1	L	0.5 TYP.	
F	0.15	0.25	M	0.25	0.325

CLASSIFICATION OF h_{FE}

Product-Rank	2SC4617-Q	2SC4617-R	2SC4617-S
Range	120~270	180~390	270~560
Marking	BQ	BR	BS

PACKAGE INFORMATION

Package	MPQ	LeaderSize
SOT-523	3K	7' inch



ABSOLUTE MAXIMUM RATINGS (T_A = 25℃ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	7	V
Collector Currrent	I_C	150	mA
Collector Power Dissipation	P_C	150	mW
Junction & Storage Temperature	T_J, T_{STG}	150, -55 ~ 150	℃

ELECTRICAL CHARACTERISTICS (T_A = 25℃ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-base breakdown voltage	$V_{(BR)CBO}$	60	-	-	V	I_C=50μA, I_E=0
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	50	-	-	V	I_C=1mA, I_B=0
Emitter-base breakdown voltage	$V_{(BR)EBO}$	7	-	-	V	I_E=50μA, I_C=0
Collector cut-off current	I_{CBO}	-	-	0.1	μA	V_{CB}=60V, I_E=0
Emitter cut-off current	I_{EBO}	-	-	0.1	μA	V_{EB}= 7V, I_C=0
Collector-emitter saturation voltage *	$V_{CE(sat)}$	-	-	0.4	V	I_C=50mA, I_B=5mA
DC current gain	h_{FE}	120	-	560		V_{CE}=6V, I_C=1mA
Transition frequency	f_T	-	180	-	MHz	V_{CE}=12V, I_E=2mA, f=100MHz
Collector output capacitance	C_{ob}	-	-	3.5	pF	V_{CB}=12V, I_E=0, f=1MHz

***** Pulse Test :Pulse Width ≤300us,D.C ≤ 2%

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CHARACTERISTIC CURVES

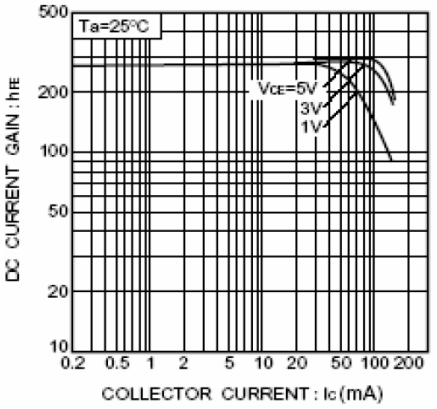


Fig.1 DC current gain vs. collector current

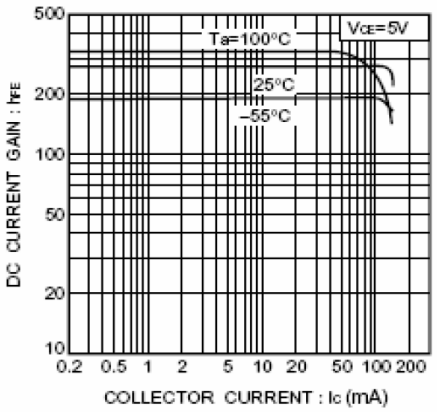


Fig.2 DC current gain vs. collector current

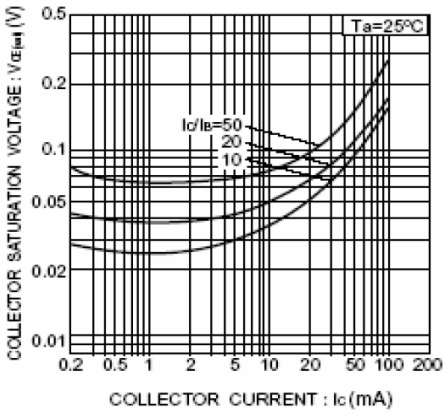


Fig. 3 Collector-emitter saturation voltage vs. collector current

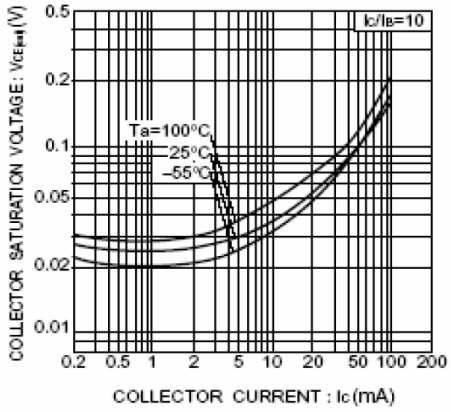


Fig.4 Collector-emitter saturation voltage vs. collector current

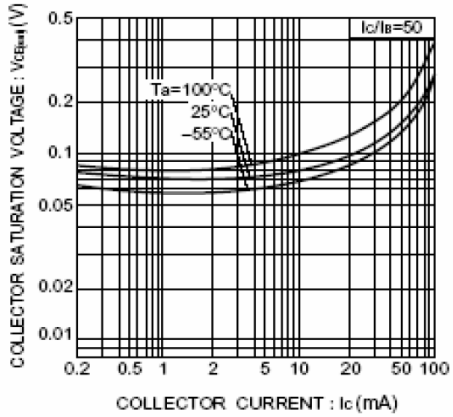


Fig.5 Collector-emitter saturation voltage vs. collector current

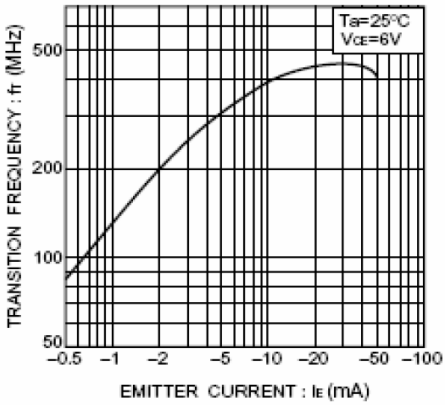


Fig.6 Gain bandwidth product vs. emitter current

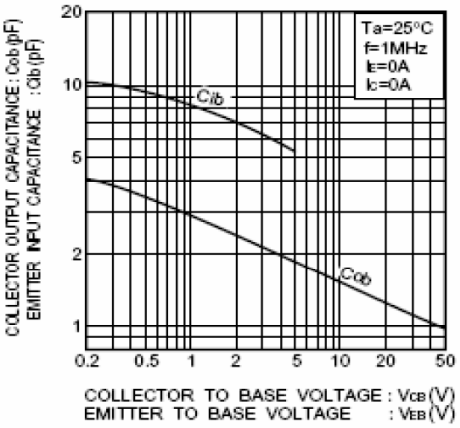


Fig.7 Collector output capacitance vs. collector-base voltage
Emitter input capacitance vs. emitter-base voltage

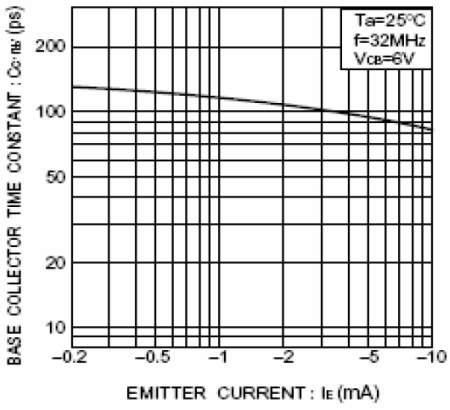


Fig.8 Base-collector time constant vs. emitter current