



2SC4617-Q 2SC4617-R 2SC4617-S

Features

- Halogen free available upon request by adding suffix "-HF"
- Complement to 2SA1774-Q/R/S
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings @ 25°C Unless Otherwise Specified

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	50	V
V_{CBO}	Collector-Base Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	150	mA
P_C	Collector Dissipation	150	mW
T_J	Operating Junction Temperature	-55 to +150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

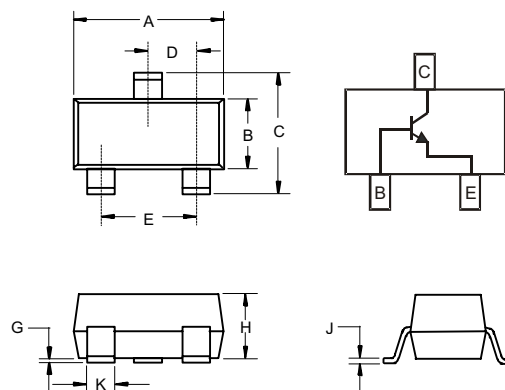
Symbol	Parameter	Min	Typ	Max	Units
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C=1mA$, $I_E=0$)	50	---	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=50uA$, $I_E=0$)	50	---	---	Vdc
$V_{(BR)EBO}$	Collector-Emitter Breakdown Voltage ($I_E=50uA$, $I_C=0$)	5	---	---	Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=30Vdc$, $I_E=0Vdc$)	---	---	0.5	μA
I_{EBO}	Emitter Cutoff Current ($V_{EB}=4Vdc$, $I_C=0Vdc$)	---	---	0.5	μA
h_{FE}	DC Current Gain ($I_C=1mA$, $V_{CE}=6Vdc$)	120	---	560	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=50mA$, $I_E=5mA$)	---	---	0.4	Vdc
f_T	Transition Frequency ($V_{CE}=12Vdc$, $I_C=2mA$, $f=100MHz$)	---	180	---	MHz
C_{ob}	Output Capacitance ($V_{CB}=12Vdc$, $f=1.0MHz$, $I_E=0$)	---	2.0	3.5	pF

Classification OF h_{FE}

Rank	Q	R	S
Range	120-270	180-390	270-560
Marking	BQ	BR	BS

NPN General Purpose Transistors

SOT-523



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.059	.067	1.50	1.70	
B	.030	.033	0.75	0.85	
C	.057	.069	1.45	1.75	
D	.020 Nominal		0.50Nominal		
E	.035	.043	0.90	1.10	
G	.000	.004	.000	.100	
H	.028	.031	.70	0.80	
J	.004	.008	.100	.200	
K	.010	.014	.25	.35	

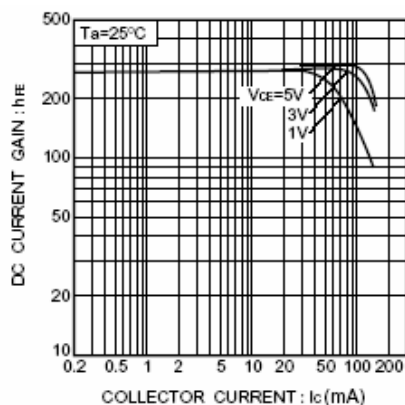


Fig.1 DC current gain vs. collector current

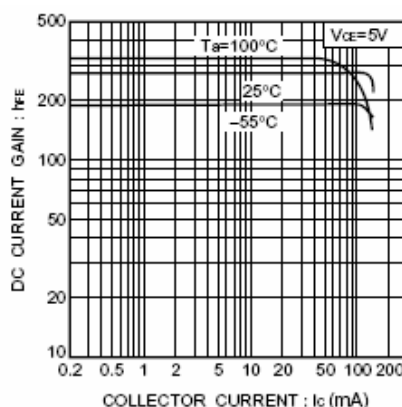


Fig.2 DC current gain vs. collector current

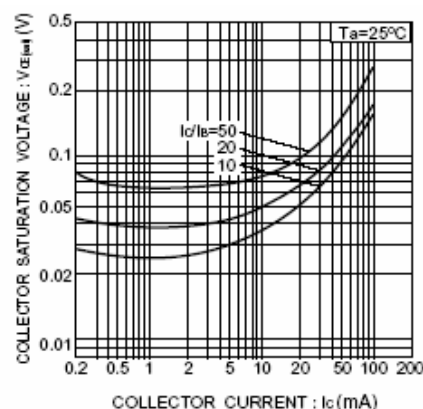


Fig.3 Collector-emitter saturation voltage vs. collector current

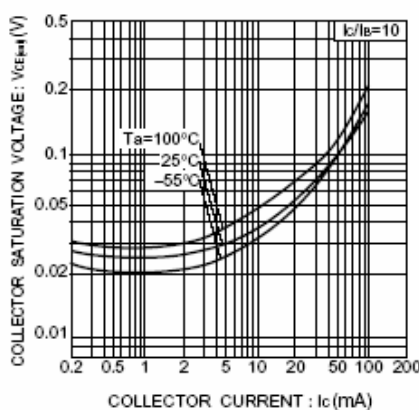


Fig.4 Collector-emitter saturation voltage vs. collector current

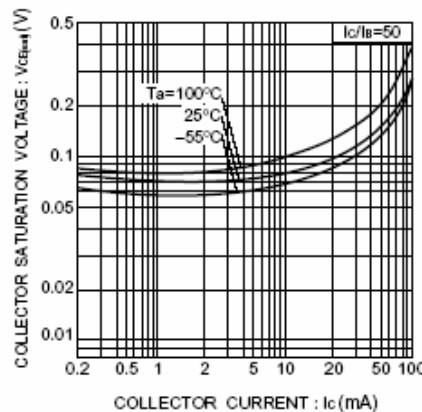


Fig.5 Collector-emitter saturation voltage vs. collector current

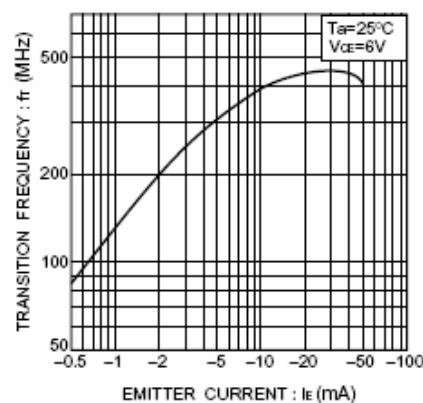


Fig.6 Gain bandwidth product vs. emitter current

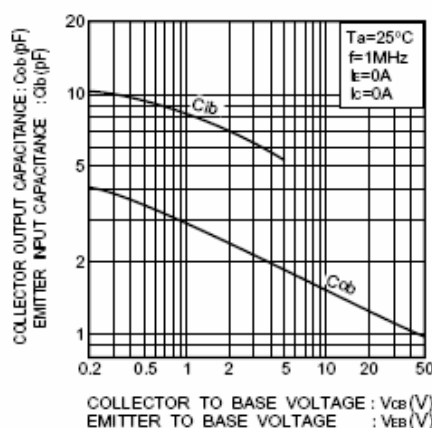
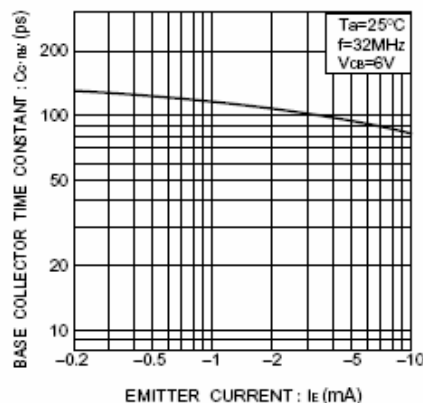
Fig.7 Collector output capacitance vs. collector-base voltage
Emitter input capacitance vs. emitter-base voltage

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

Ordering Information :

Device	Packing
Part Number-TP	Tape & Reel; 3 Kpcs / Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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