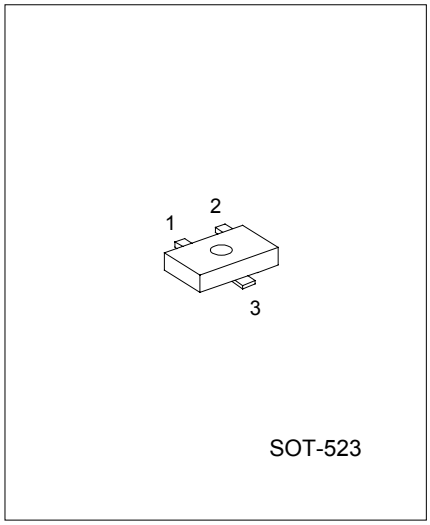
UTC 2SC4617 NPN EPITAXIAL SILICON TRANSISTOR

GENERAL PURPOSE TRANSISTOR

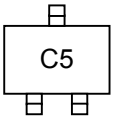


1: EMITTER 2: BASE 3: COLLECTOR

FEATURES

* Low Cob
  Cob=2.0pF (typ)
* Complements the UTC 2SA1774

MARKING



ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current	Ic	0.15	A
Collector Power Dissipation	Pc	0.15	W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS(Ta=25°C, unless otherwise specified.)

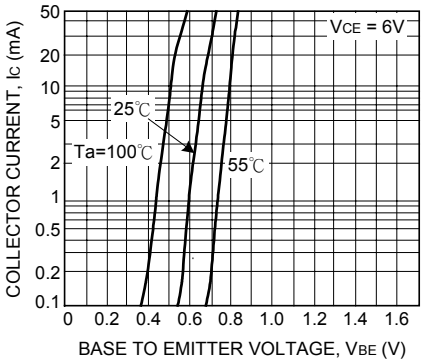
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Base Breakdown Voltage	BV_{CBO}	Ic= 50 μA	60			V
Collector Emitter Breakdown Voltage	BV_{CEO}	Ic= 1mA	50			V
Emitter-base Breakdown Voltage	BV_{EBO}	I_E=50 μA	7			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=60V			0.1	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}= 7V			0.1	μA
DC Current Transfer Ratio	h_{FE}	V_{CE}=6V,Ic=1mA	120		560	
Collector-Emitter Saturation Voltage	V_{CE}(sat)	Ic=50mA, I_B=5mA			0.4	V
Transition Frequency	f_T	V_{CE}=12V, I_E= -2mA, f=100MHz		180		MHz
Output Capacitance	Cob	V_{CE}= 12V, I_E= 0A, f=1MHz		2	3.5	pF

CLASSIFICATION OF hFE

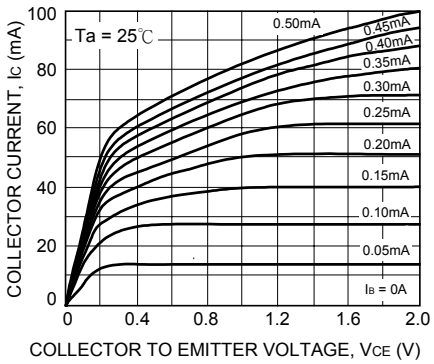
RANK	Q	R	S
RANGE	120 ~ 270	180 ~ 390	270 ~ 560

ELECTRICAL CHARACTERISTICS CURVES

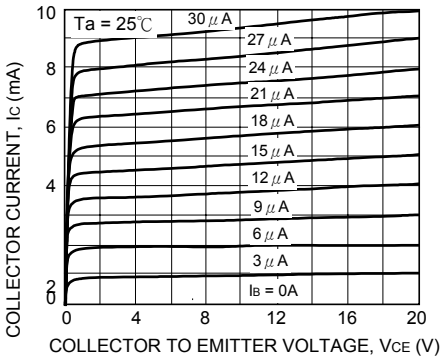
Grounded emitter propagation characteristics



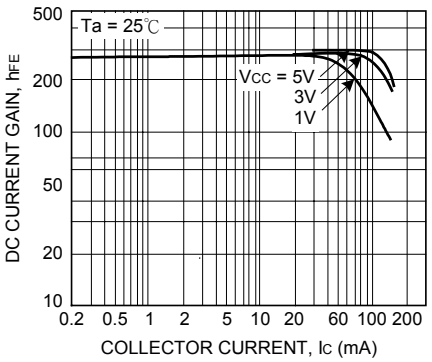
Grounded emitter output characteristics (Ⅰ)



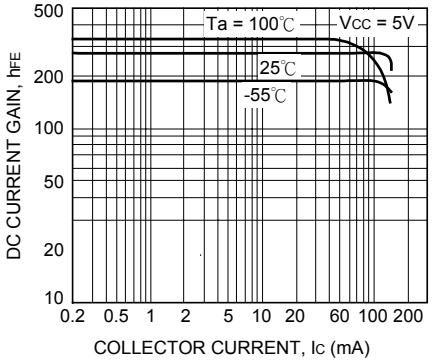
Grounded emitter output characteristics (Ⅱ)



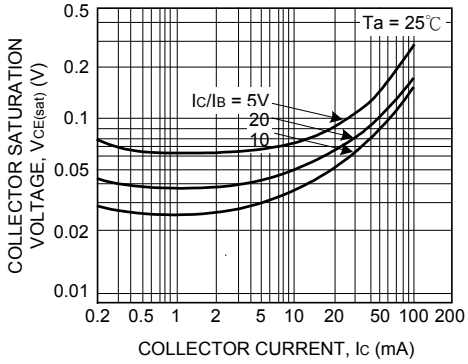
DC current gain vs. collector current (Ⅰ)



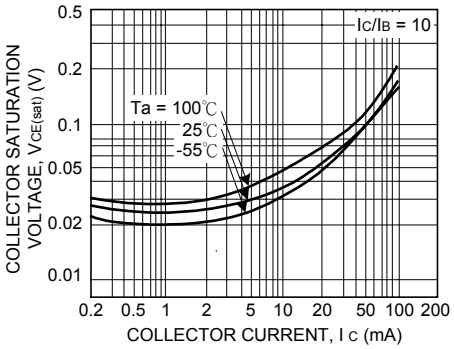
DC current gain vs. collector current (Ⅱ)



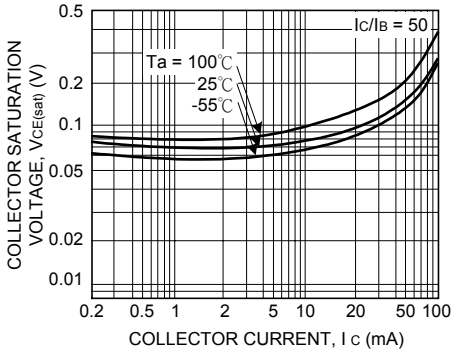
Collector-emitter saturation voltage vs. collector current



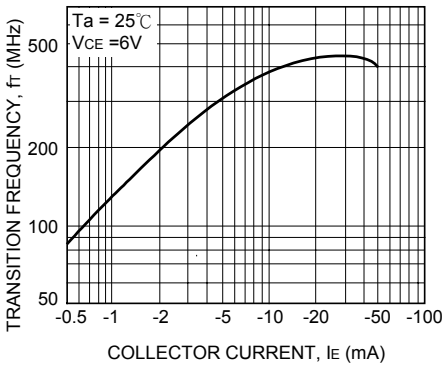
Collector-emitter saturation voltage vs. collector current (Ⅰ)



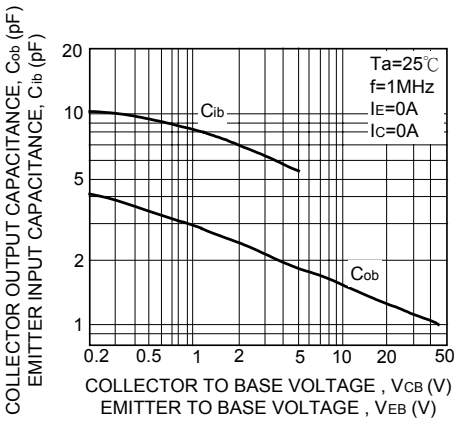
Collector-emitter saturation voltage vs. collector current (Ⅱ)



Gain bandwidth product vs. emitter current



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



Base-collector time constant vs. emitter current