

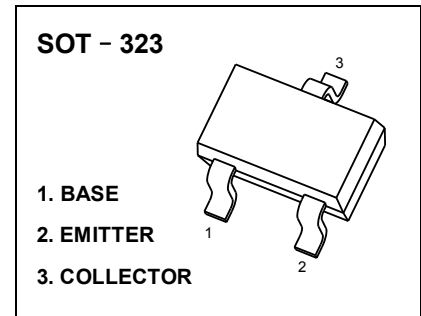
2SC4177 TRANSISTOR(NPN)

FEATURES

- High DC Current Gain
- Complementary to 2SA1611
- High Voltage

APPLICATIONS

- General Purpose Amplification



MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	60	V
V _{CEO}	Collector-Emitter Voltage	50	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current	100	mA
P _C	Collector Power Dissipation	150	mW
R _{θJA}	Thermal Resistance From Junction To Ambient	833	°C/W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

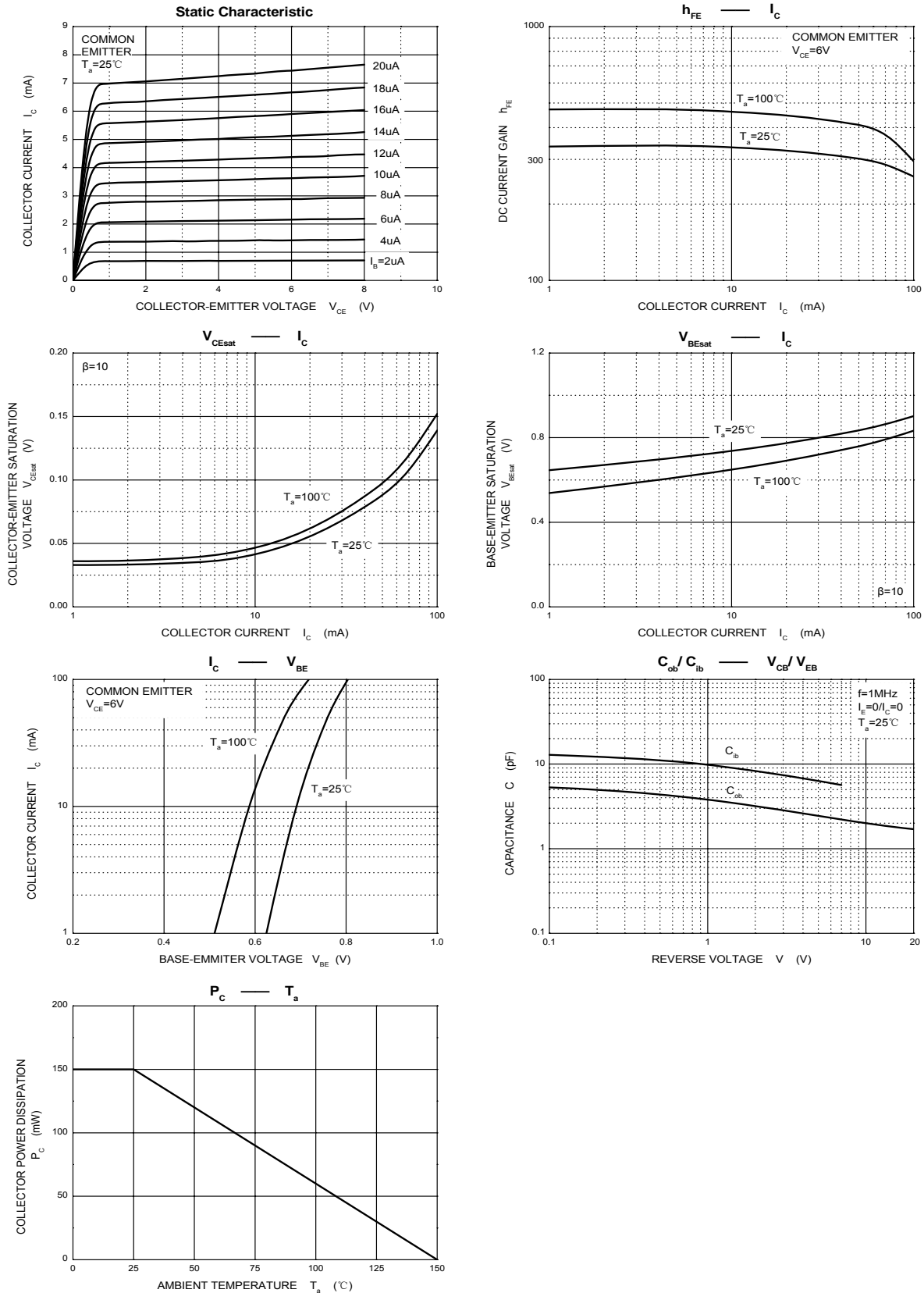
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =100μA, I _E =0	60			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA, I _B =0	50			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =100μA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} =60V, I _E =0			100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =5V, I _C =0			100	nA
DC current gain	h _{FE} *	V _{CE} =6V, I _C =1mA	90		600	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =100mA, I _B =10mA			0.3	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =100mA, I _B =10mA			1	V
Base-emitter voltage	V _{BE}	V _{CE} =6V, I _C =1mA	0.55		0.65	V
Transition frequency	f _T	V _{CE} =6V, I _C =10mA		250		MHz
Collector output capacitance	C _{ob}	V _{CB} =6V, I _E =0, f=1MHz		3		pF

*Pulse test: pulse width ≤350μs, duty cycles ≤ 2.0%.

CLASSIFICATION OF h_{FE}

RANK	L4	L5	L6	L7
RANGE	90 - 180	135 - 270	200 - 400	300 - 600
MARKING	L4	L5	L6	L7

TYPICAL CHARACTERISTICS



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-323

