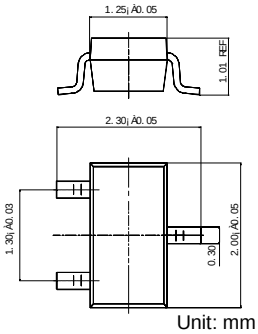
SOT-323
1. BASE
2. EMITTER
3. COLLECTOR



Unit: mm

2SC4177 TRANSISTOR (NPN)

FEATURES

Power dissipation

P_{CM}: 0.15 W (Tamb=25℃)

Collector current

I_{CM}: 0.1 A

Collector-base voltage

$V_{(BR)CBO}$: 60 V

Operating and storage junction temperature range

T_J, T_{stg}: -55℃ to +150℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	Ic=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	5.0		V
Collector cut-off current	I_{CBO}	V_{CB}=60V , I_E=0		0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=5V , I_C=0		0.1	μA
DC current gain	h_{FE}	V_{CE}=6.0 V, I_C= 1mA	90	600	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=100 mA, I_B=10mA		0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C= 100mA, I_B=10mA		1.0	V
Transition frequency	f_T	V_{CE}= 6.0V, I_E= -10mA	250		MHz
Output Capacitance	C_{ob}	V_{CB}=6.0V, I_E= 0 f=1.0MHz		3.0	pF

CLASSIFICATION OF h_{FE}

Marking	L4	L5	L6	L7
Range	90-180	135-270	200-400	300-600