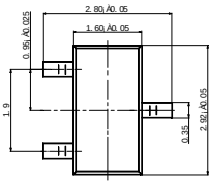
2SD596 TRANSISTOR (NPN)

SOT-23-3L

1. BASE
2. EMITTER
3. COLLECTOR



FEATURES

Power dissipation

P_{CM}: 0.2 W (Tamb=25℃)

Collector current

I_{CM}: 0.7 A

Collector-base voltage

$V_{(BR)CBO}$: 30 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	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	Ic=100μA, I_E=0	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	Ic= 1 mA, I_B=0	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= 100μA, I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=30 V , I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= 5V , I_C=0			0.1	μA
DC current gain	$h_{FE(1)}$*	V_{CE}= 1V, I_C= 100mA	110		400	
	$h_{FE(2)}$*	V_{CE}=1V, I_C= 700mA	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$*	I_C=700 mA, I_B= 70mA			0.6	V
Base-emitter voltage	$V_{BE(on)}$*	V_{CE}=6V, I_C=10mA	0.6		0.7	V
Transition frequency	f_T	V_{CE}= 6V, I_C= 10mA	140			MHz

* Pulse test : Pulse width ≤350μs, Duty Cycle≤2%.

CLASSIFICATION OF $h_{FE(1)}$

Marking	DV1	DV2	DV3	DV4	DV5
Range	110-180	135-220	170-270	200-320	250-400