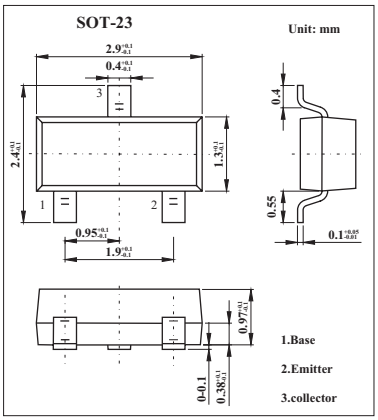
NPN Epitaxial Planar Silicon Transistors

2SD1935



Features

- Large current capacity.
- Low collector to emitter saturation voltage.
- Very small-sized package permitting sets to be made smaller and slimer.

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	15	V
Collector-emitter voltage	V_{CEO}	15	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	0.8	A
Collector current (pulse)	I_{CP}	3	A
Collector dissipation	P_C	200	mW
Jumction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = 12V , I_E = 0			100	nA
Emitter cutoff current	I_{EBO}	V_{EB} = 4V , I_C = 0			100	nA
DC current Gain	h_{FE}	V_{CE} = 2V , I_C = 50mA	135		900	
Gain bandwidth product	f_T	V_{CE} = 2V , I_C = 50mA		200		MHz
Output capacitance	C_{ob}	V_{CB} = 10V , f = 1MHz		10		pF
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = 5mA , I_B = 0.5mA		10	25	mV
	$V_{CE(sat)}$	I_C = 400mA , I_B = 20mA		100	200	mV
Base-to-emitter saturation voltage	$V_{BE(sat)}$	I_C = 400mA , I_B =20mA		0.9	1.2	V
Collector-to-base breakdown voltage	$V_{(BR)CBO}$	I_C = 10μA , I_E = 0	15			V
Collector-to-emitter breakdown voltage	$V_{(BR)CEO}$	I_C = 1mA , R_{BE} = ∞	15			V
Emitter-to-base breakdown voltage	$V_{(BR)EBO}$	I_E = 10μA , I_C = 0	5			V

h_{FE} Classification

Marking	CT			
Rank	5	6	7	8
hFE	135～270	200～400	300～600	450～900