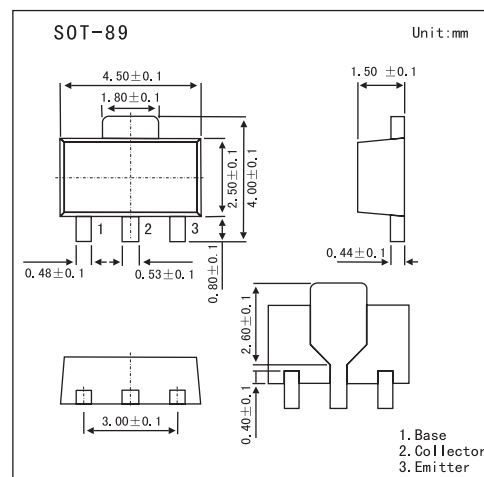


Medium Power Transistor

2SD2537

■ Features

- High DC current gain.
- High emitter-base voltage.
- Low saturation voltage.

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	30	V
Collector-emitter voltage	V_{CE0}	25	V
Emitter-base voltage	V_{EB0}	12	V
Collector current	I_C	1.2	A
Collector power dissipation	P_C	2	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	BV_{CB0}	$I_C=10\mu\text{A}$	30			V
Collector-emitter breakdown voltage	BV_{CE0}	$I_C=1\text{mA}$	25			V
Emitter-base breakdown voltage	BV_{EB0}	$I_E=10\mu\text{A}$	12			V
Collector cutoff current	I_{CB0}	$V_{CB}=30\text{V}$			0.3	μA
Emitter cutoff current	I_{EB0}	$V_{EB}=12\text{V}$			0.3	μA
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500\text{mA}$, $I_B=10\text{mA}$			0.3	V
DC current transfer ratio	h_{FE}	$V_{CE}=5\text{V}$, $I_C=0.5\text{A}$	820		2700	
Output capacitance	f_T	$V_{CE}=10\text{V}$, $I_E=-50\text{mA}$, $f=100\text{MHz}$		200		MHz
Transition frequency	C_{ob}	$V_{CB}=10\text{V}$, $I_E=0\text{A}$, $f=1\text{MHz}$		20		pF

■ h_{FE} Classification

Marking	DV	
Rank	V	W
h_{FE}	820~1800	1200~2700