

2SD2575

Silicon NPN epitaxial planer type

For low-frequency power amplification

Features

- Low collector to emitter saturation voltage $V_{CE(sat)}$.

Absolute Maximum Ratings (Ta=25°C)

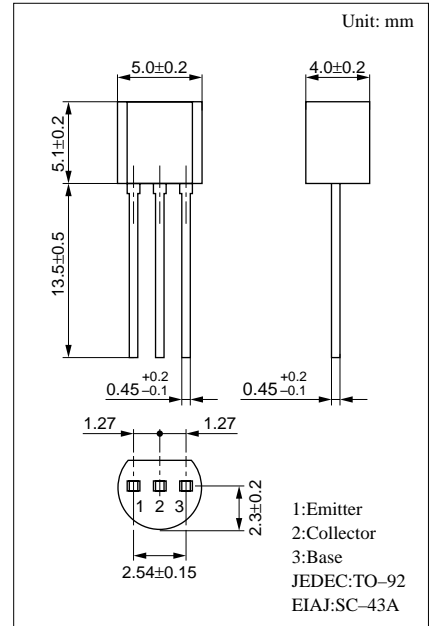
Parameter	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	15	V
Collector to emitter voltage	V_{CEO}	10	V
Emitter to base voltage	V_{EBO}	10	V
Peak collector current	I_{CP}^{*1}	9	A
Collector current	I_C	5	A
Collector power dissipation	P_C	750	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 ~ +150	°C

*1 Measuring time: t = 380µsec

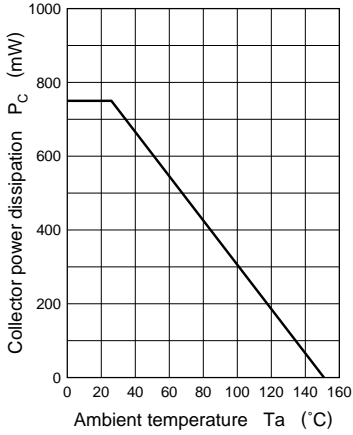
Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = 10V, I_E = 0$			0.1	µA
	I_{CEO}	$V_{CE} = 5V, I_B = 0$			1.0	µA
Emitter cutoff current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			0.1	µA
Collector to emitter voltage	V_{CEO}	$I_C = 1mA, I_B = 0$	10			V
Emitter to base voltage	V_{EBO}	$I_E = 10µA, I_C = 0$	10			V
Forward current transfer ratio	h_{FE1}	$V_{CE} = 2V, I_C = 0.5A^*$	700			
	h_{FE2}	$V_{CE} = 2V, I_C = 2A^*$	195			
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 3A, I_B = 0.1A^*$		0.28	0.5	V
Transition frequency	f_T	$V_{CB} = 6V, I_E = -50mA, f = 200MHz$		170		MHz
Collector output capacitance	C_{ob}	$V_{CB} = 20V, I_E = 0, f = 1MHz$		45	65	pF

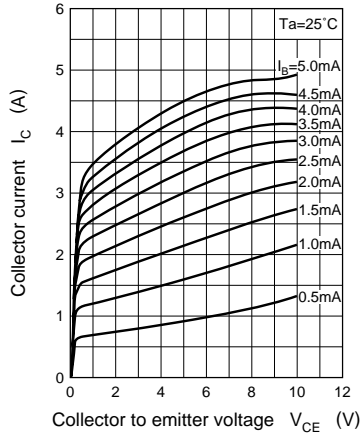
* Pulse measurement



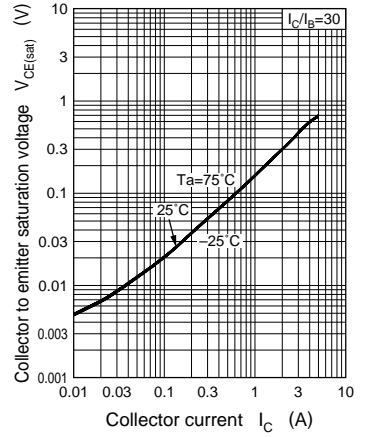
$P_C - T_a$



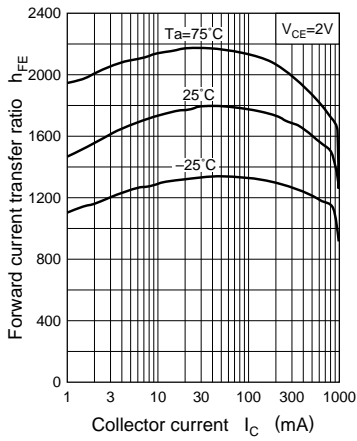
$I_C - V_{CE}$



$V_{CE(sat)} - I_C$



$h_{FE} - I_C$



$C_{ob} - V_{CB}$

