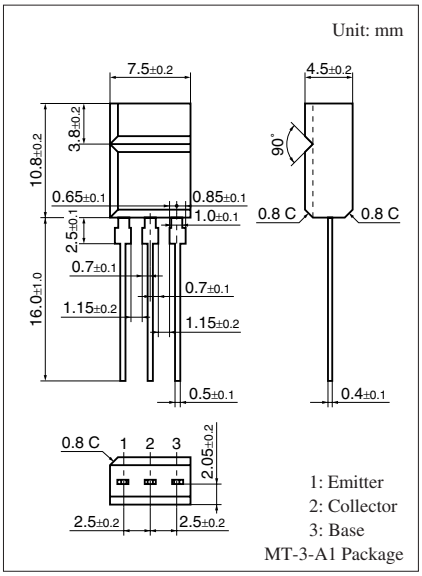
2SD2573

Silicon NPN triple diffusion planar type

For high current amplification, power amplification



■ Features

- Low collector-emitter saturation voltage $V_{CE(sat)}$
- Allowing supply with the radial taping

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter		Symbol	Rating	Unit
Collector-base voltage (Emitter open)		V_{CBO}	80	V
Collector-emitter voltage (Base open)		V_{CEO}	60	V
Emitter-base voltage (Collector open)		V_{EBO}	6	V
Collector current		I_C	3	A
Peak collector current		I_{CP}	6	A
Collector power dissipation	$T_C = 25°C$	P_C	1.5	W
Junction temperature		T_j	150	°C
Storage temperature		T_{stg}	−55 to +150	°C

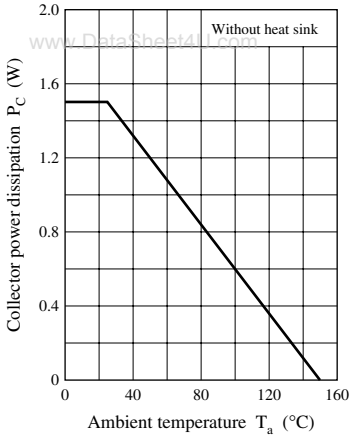
■ Electrical Characteristics $T_a = 25°C \pm 3°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	V_{CEO}	I_C = 25 mA, I_B = 0	60			V
Collector-base cutoff current (Emitter open)	I_{CBO}	V_{CB} = 80 V, I_E = 0			100	µA
Collector-emitter cutoff current (Base open)	I_{CEO}	V_{CE} = 40 V, I_B = 0			100	µA
Emitter-base cutoff current (Collector open)	I_{EBO}	V_{EB} = 6 V, I_C = 0			100	µA
Forward current transfer ratio *	h_{FE}	V_{CE} = 4 V, I_C = 0.5 A	500		2 500	—
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = 2 A, I_B = 0.05 A			1.0	V
Transition frequency	f_T	V_{CE} = 12 V, I_C = 0.2 A, f = 10 MHz		50		MHz

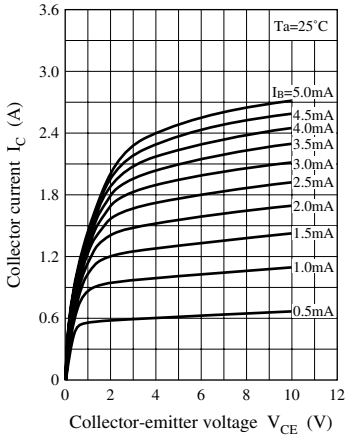
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.
2. *: Rank classification

Rank	P	Q	R
h_{FE}	500 to 1 000	800 to 1 500	1 200 to 2 500

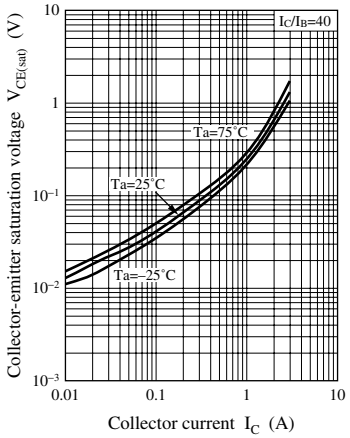
P_C — T_a



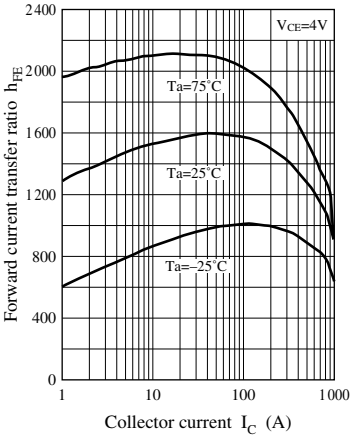
I_C — V_{CE}



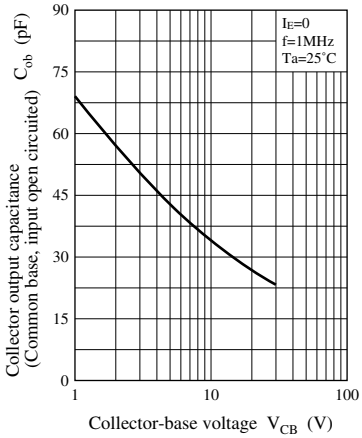
$V_{CE(sat)}$ — I_C



h_{FE} — I_C



C_{ob} — V_{CB}



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