Unit: mm 4.6±0.2

2SD2375

Silicon NPN triple diffusion planar type

For power amplification with high forward current transfer ratio

Features

- \bullet High forward current transfer ratio $h_{F\!E}$ which has satisfactory linearity
- Full-pack package which can be installed to the heat sink with one screw

9.9±0.3 2.9±0.2 φ 3.2±0.1 **15.0**±0.5 .4±0.2 2.6±0.1 1.6±0.2 **13.7±0.2** Dip 0.55±0.15 0.8±0.1 Solder .54±0.30 5.08±0.50 3 1: Base 2: Collector ---------------3: Emitter TO-220D-A1 Package

Absolute Maximum Ratings $T_C = 25^{\circ}C$

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	А
Peak collector current	I _{CP}	6	А
Base current	IB	1	А
Collector power dissipation	P _C	25	W
$T_a = 25^{\circ}C$		2.0	
Junction temperature	Tj	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

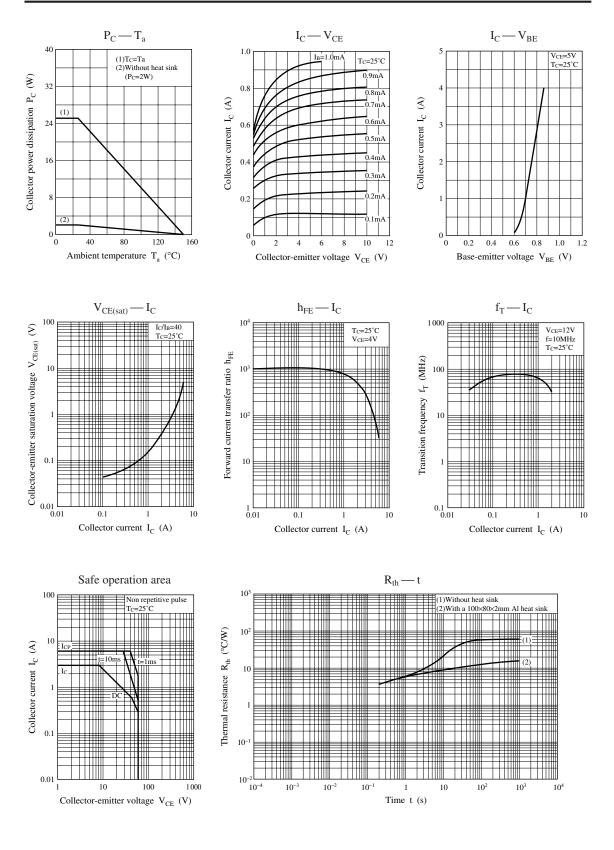
Electrical Characteristics $T_C = 25^{\circ}C \pm 3^{\circ}C$

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-emitter voltage (Base open)	V _{CEO}	$I_{\rm C} = 25 \text{ mA}, I_{\rm B} = 0$	60			V
Collector-base cutoff current (Emitter open)	I _{CBO}	$V_{CB} = 80 V, I_E = 0$			100	μΑ
Collector-emitter cutoff current (Base open)	I _{CEO}	$V_{CE} = 40 \text{ V}, I_B = 0$			100	μΑ
Emitter-base cutoff current (Collector open)	I _{EBO}	$V_{EB} = 6 V, I_C = 0$			100	μΑ
Forward current transfer ratio *	h _{FE}	$V_{CE} = 4 V, I_C = 0.5 A$	500		1 500	
Collector-emitter saturation voltage	V _{CE(sat)}	$I_{\rm C} = 2 \text{ A}, I_{\rm B} = 0.05 \text{ A}$			1.0	V
Transition frequency	f _T	$V_{CE} = 12 \text{ V}, I_C = 0.2 \text{ A}, f = 10 \text{ MHz}$		50		MHz

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

Rank	Q	Р
h _{FE}	500 to 1 000	800 to 1 500

Panasonic



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