Transistors Panasonic

2SD0602

Silicon NPN epitaxial planar type

For general amplification Complementary to 2SB0710

■ Features

- \bullet Low collector-emitter saturation voltage $V_{\text{CE(sat)}}$
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing.

■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	V _{CBO}	30	V	
Collector-emitter voltage (Base open)	V _{CEO}	25	V	
Emitter-base voltage (Collector open)	$V_{\rm EBO}$	5	V	
Collector current	I_{C}	500	mA	
Peak collector current	I_{CP}	1	A	
Collector power dissipation	P _C	200	mW	
Junction temperature	T _j	150	°C	
Storage temperature	T _{stg}	-55 to +150	°C	

■ Package

- Code
 - Mini3-G1
- Pin Name
 - 1: Base
- 2: Emitter
- 3: Collector
- Marking Symbol: W

■ Electrical Characteristics $T_a = 25$ °C±3°C

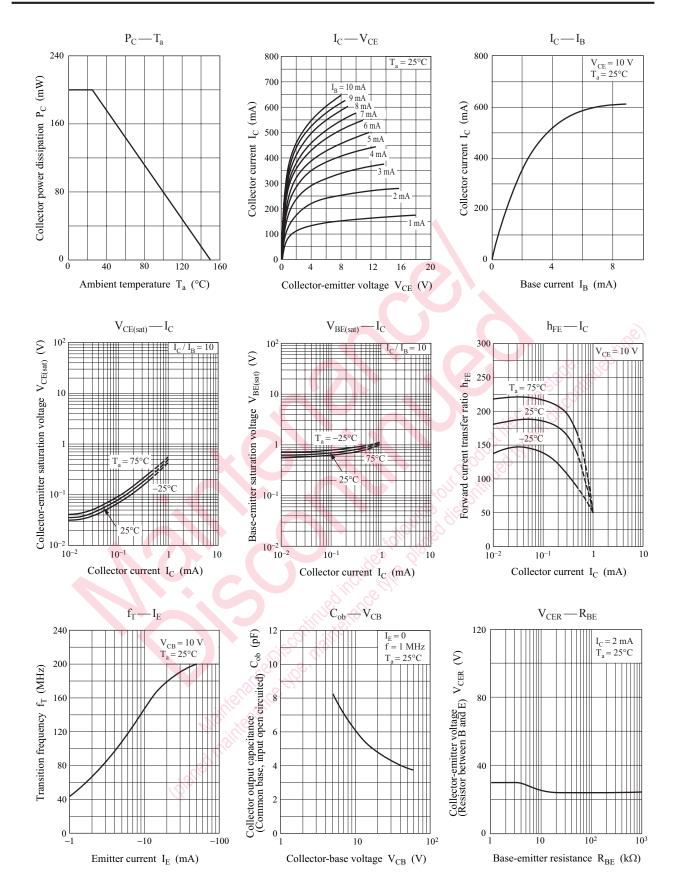
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V _{CBO}	$I_{\rm C} = 10 \mu\text{A}, I_{\rm E} = 0$	30			V
Collector-emitter voltage (Base open)	V _{CEO}	$I_{\rm C} = 10 \text{mA}, I_{\rm B} = 0$	25			V
Emitter-base voltage (Collector open)	$V_{\rm EBO}$	$I_E = 10 \mu A, I_C = 0$	5			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = 20 \text{ V}, I_{E} = 0$			0.1	μΑ
Forward current transfer ratio *1	h _{FE1} *2	$V_{CE} = 10 \text{ V}, I_{C} = 150 \text{ mA}$	85		340	_
	h _{FE2}	$V_{CE} = 10 \text{ V}, I_{C} = 500 \text{ mA}$	40			
Collector-emitter saturation voltage *1	V _{CE(sat)}	$I_C = 300 \text{ mA}, I_B = 30 \text{ mA}$		0.35	0.60	V
Transition frequency	f_{T}	$V_{CB} = 10 \text{ V}, I_E = -50 \text{ mA}, f = 200 \text{ MHz}$		200		MHz
Collector output capacitance (Common base, input open circuited)	Cob	$V_{CB} = 10 \text{ V}, I_{E} = 0, f = 1 \text{ MHz}$		6	15	pF

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

Rank	Q	R	S	No-rank
h_{FE1}	85 to 170	120 to 240	170 to 340	85 to 340
Marking symbol	WQ	WR	WS	W

Product of no-rank is not classified and have no indication for rank.

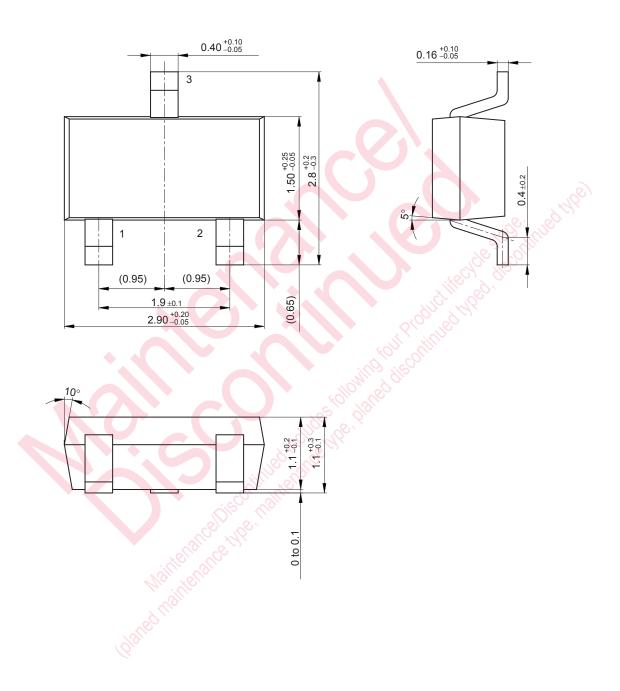
2SD0602 Panasonic



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Panasonic 2SD0602

Mini3-G1 Unit: mm



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