

2SD1819A

Silicon NPN epitaxial planar type

For general amplification
Complementary to 2SB1218A

■ Features

- High forward current transfer ratio h_{FE}
- Low collector-emitter saturation voltage $V_{CE(sat)}$
- S-Mini type package, allowing downsizing of the equipment and automatic insertion through the tape pacing and the magazine pacing.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	60	V
Collector-emitter voltage (Base open)	V_{CEO}	50	V
Emitter-base voltage (Collector open)	V_{EBO}	7	V
Collector current	I_C	100	mA
Peak collector current	I_{CP}	200	mA
Collector power dissipation	P_C	150	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

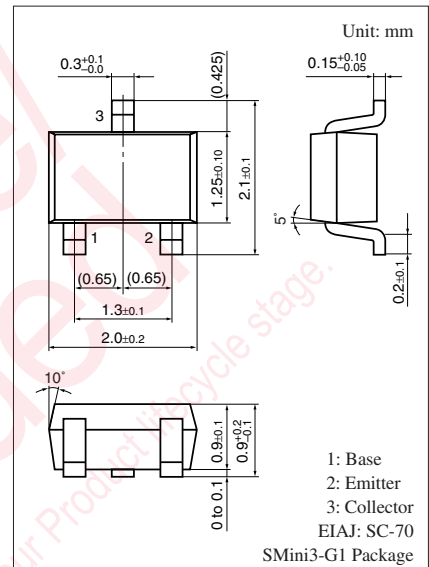
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = 10 \mu\text{A}$, $I_E = 0$	60			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = 2 \text{ mA}$, $I_B = 0$	50			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = 10 \mu\text{A}$, $I_C = 0$	7			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = 20 \text{ V}$, $I_E = 0$			0.1	μA
Collector-emitter cutoff current (Base open)	I_{CEO}	$V_{CE} = 10 \text{ V}$, $I_B = 0$			100	μA
Forward current transfer ratio	h_{FE1}^*	$V_{CE} = 10 \text{ V}$, $I_C = 2 \text{ mA}$	160		460	—
	h_{FE2}	$V_{CE} = 2 \text{ V}$, $I_C = 100 \text{ mA}$	90			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100 \text{ mA}$, $I_B = 10 \text{ mA}$		0.1	0.3	V
Transition frequency	f_T	$V_{CB} = 10 \text{ V}$, $I_E = -2 \text{ mA}$, $f = 200 \text{ MHz}$		150		MHz
Collector output capacitance (Common base, input open circuited)	C_{ob}	$V_{CB} = 10 \text{ V}$, $I_E = 0$, $f = 1 \text{ MHz}$		3.5		pF

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

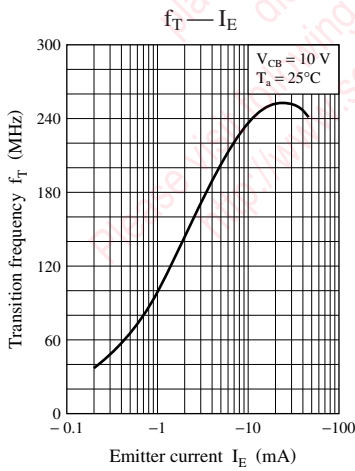
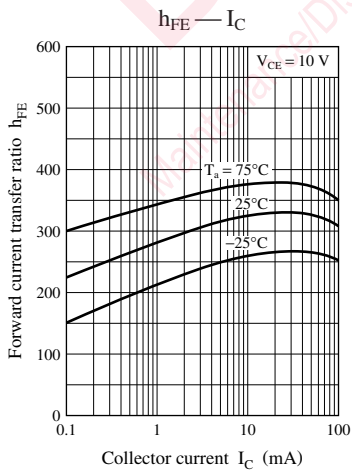
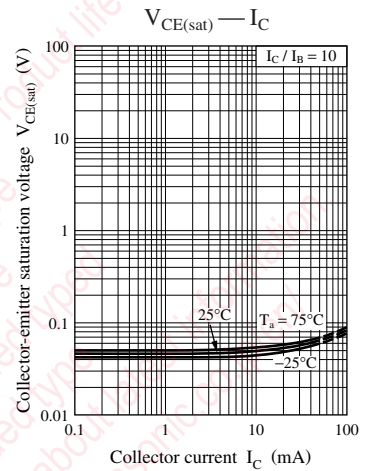
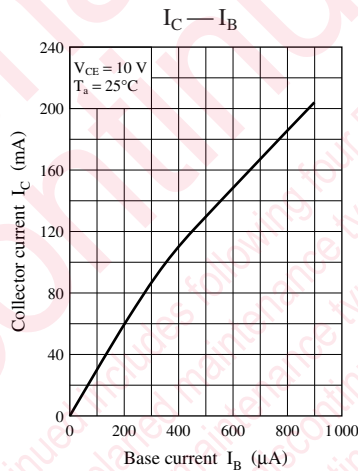
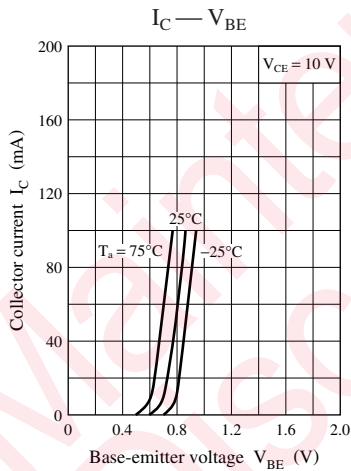
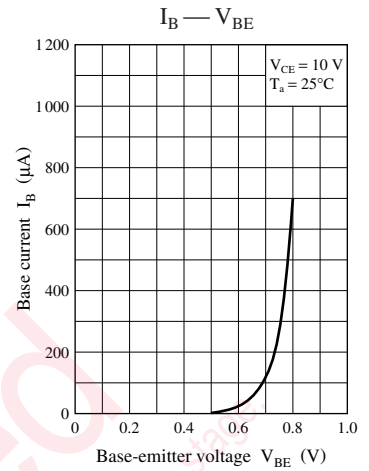
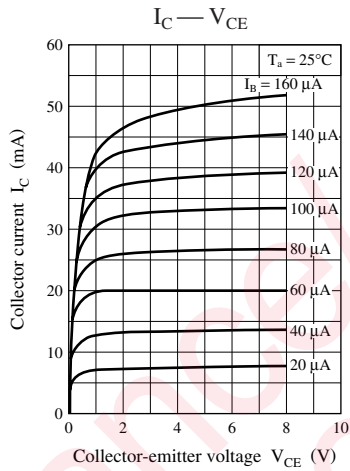
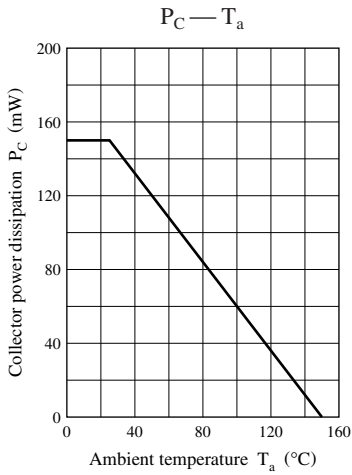
2. *: Rank classification

Rank	Q	R	S	No rank
h_{FE1}	160 to 260	210 to 340	290 to 460	160 to 460
Marking symbol	ZQ	ZR	ZS	Z

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



Marking Symbol: Z



utions in using the technical information and scribed in this book

s book is to be exported or provided to non-residents, the laws and
rd to security export control, must be observed.

ly to show the main characteristics and application circuit examples
l property right or other right owned by our company or any other
any as to the infringement upon any such right owned by any other
rmation described in this book.

standard applications or general electronic equipment (such as office
and household appliances).

ng applications:

biles, traffic control equipment, combustion equipment, life support
reliability are required, or if the failure or malfunction of the prod-

ck are subject to change without notice for modification and/or im-
use of the products, therefore, ask for the most up-to-date Product
atisfy your requirements.

bsolute maximum rating and the guaranteed operating conditions
(.). Especially, please be careful not to exceed the range of absolute
er-off and mode-switching. Otherwise, we will not be liable for any

take into the consideration of incidence of break down and failure
n the systems such as redundant design, arresting the spread of fire
al injury, fire, social damages, for example, by using the products.

own and characteristics change due to external factors (ESD, EOS,
mounting or at customer's process. When using products for which
shelf life and the elapsed time since first opening the packages.

ly or partially, without the prior written permission of Matsushita

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 [View 2SD1819ARL on WIN SOURCE](#)

 [Panasonic Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management