DRA5115E

Silicon PNP epitaxial planar type

For digital circuits Complementary to DRC5115E DRA2115E in SMini3 type package

■ Features

- ullet Low collector-emitter saturation voltage $V_{\text{CE(sat)}}$
- Contributes to miniaturization of sets, reduction of component count.
- Eco-friendly Halogen-free package

■ Packaging

Embossed type (Thermo-compression sealing): 3000 pcs / reel (standard)

■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	V _{CBO}	-50	V	
Collector-emitter voltage (Base open)	V _{CEO}	-50	V	
Collector current	I_{C}	-100	mA	
Total power dissipation	P _T	150	mW	
Junction temperature	T _j	150	°C	
Storage temperature	T _{stg}	-55 to +150	°C	

■ Package

• Code

SMini3-F2-B

- Pin Name
 - 1: Base
 - 2: Emitter
 - 3: Collector

■ Marking Symbol: LN

■ Internal Connection

$$B \circ \begin{matrix} R_1 \\ R_2 \end{matrix} \qquad \circ E$$

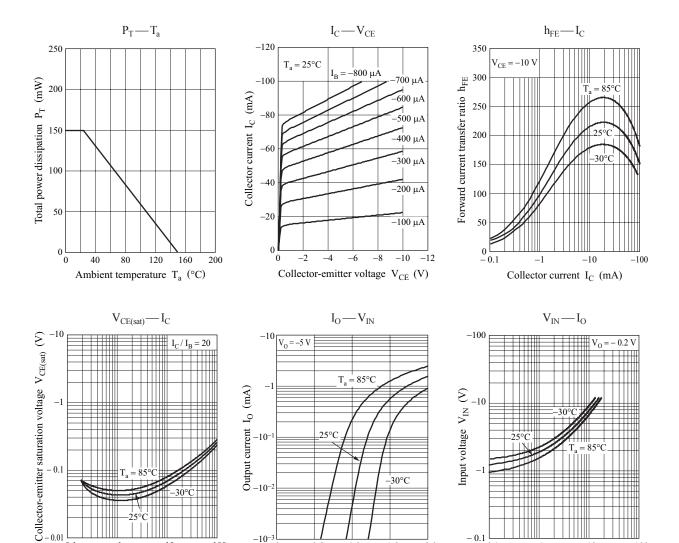
Resistance value	R_1	100	kΩ
	R_2	100	kΩ

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

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_{\rm C} = -10 \mu \text{A}, I_{\rm E} = 0$	-50			V
Collector-emitter voltage (Base open)	V _{CEO}	$I_C = -2 \text{ mA}, I_B = 0$	-50			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{\rm CB} = -50 \text{ V}, I_{\rm E} = 0$			-0.1	μΑ
Collector-emitter cutoff current (Base open)	I _{CEO}	$V_{CE} = -50 \text{ V}, I_{B} = 0$			-0.5	μΑ
Emitter-base cutoff current (Collector open)	I_{EBO}	$V_{EB} = -6 \text{ V}, I_{C} = 0$			-0.1	mA
Forward current transfer ratio	h_{FE}	$V_{CE} = -10 \text{ V}, I_{C} = -5 \text{ mA}$	80			_
Collector-emitter saturation voltage	V _{CE(sat)}	$I_C = -10 \text{ mA}, I_B = -0.5 \text{ mA}$			-0.25	V
Input voltage (ON)	V _{I(on)}	$V_{CE} = -0.2 \text{ V}, I_{C} = -5 \text{ mA}$	-5.7			V
Input voltage (OFF)	V _{I(off)}	$V_{CE} = -5 \text{ V}, I_{C} = -100 \mu\text{A}$			-0.8	V
Input resistance	R_1		-30%	100	+30%	kΩ
Resistance ratio	R_1/R_2		0.8	1.0	1.2	

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

Panasonic DRA5115E



 -10^{-3}

-0.5

Input voltage V_{IN} (V)

-100

-10

Collector current I_C (mA)

- 0.1 L

-10

Output current I_O (mA)

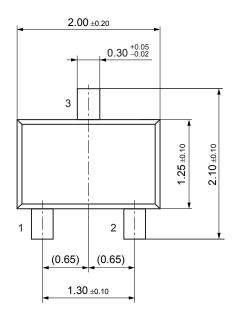
-100

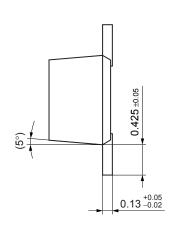
Ver. CED 2

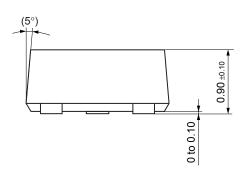
- 0.01 L - 0.1

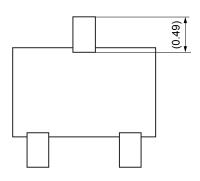
SMini3-F2-B

Unit: mm









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